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MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

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A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

EDITED BY

PROFESSOR G. F. STOUT,

WITH THE CO-OPERATION OF PROFESSOR E. B. TITCHENER, AMERICAN EDITORIAL REPRESENTATIVE, AND OF DR. E. CAIRD, PROFESSOR WARD, PROFESSOR PRINGLE-PATTISON, AND OTHER MEMBERS OF AN ADVISORY COMMITTEE.

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MIND

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I.—THE TIME QUALITY.

By Henry Rutgers Marshall.

I.

Sec. 1. When a number of years ago I published my *Pain, Pleasure and Æsthetics* I presented for examination the hypothesis that Pain-Indifference-Pleasure are diverse phases of a general quality of all presentations, which we may call the Algedonic Quality, and which is of such a nature (1) that one of its three phases is necessarily given in connexion with each elementary presentation; (2) that no more than one of the three phases can at the same moment be given in connexion with any special elementary presentation; (3) that if the proper conditions exist any one of the three phases may be given in connexion with any elementary presentation; and (4) that the state of indifference is as it were a *norm* from which pleasure and pain respectively appear as departures in opposite directions.[1]

A careful examination of the subject convinced me that the theory thus presented could be maintained successfully, provided it was assumed that the algedonic quality is of

[1] This is distinctly a psychological hypothesis. In examining it I took occasion to inquire how far it is compatible with the hypothesis that each differentiation of an individual's consciousness corresponds with a differentiation of the form of activity in the individual's nervous system. If I may judge from reviews of the book, and subsequent quotations, my discussion of the "physical basis of pleasure and pain" has for some reason appeared to many of my readers to be of more importance than the psychological theory which it was intended to elucidate. With this conclusion I cannot agree.

an elemental character: *i.e.*, that it would be displayed by psychic elements if such could exist in isolation, as is of course impossible, for the reason that consciousness as appreciated is necessarily systematic and not a mere aggregation of psychic atoms.

If we are convinced of the truth of this algedonic hypothesis, we are naturally led to ask whether there may not exist some other general quality of all presentations of a similar three-phased nature which would not be given but for the complexity of presentations as experienced.

When we turn our thought in this direction, we cannot but be struck by the fact that our experiences in relation to time have a very marked similarity in many respects with our experiences of the algedonic quality. As with the algedonic quality, the time quality, if we may so speak, (*a*) displays three phases, past time, present time, and future time; (*b*) one of which seems necessarily attached to each presentation; any one of which seems to be attachable to any given presentation if the proper conditions are given; (*c*) each of which seems to be exclusive of the other two in relation to any special presentation; (*d*) two of which, *viz.*, past time and future time, appear as contradictory opposites, while the third appears as a *norm* as it were from which the other two seem to depart in opposite directions.

Let us consider for a moment somewhat more in detail the facts which suggest this likeness of form between algedonic and time phases.

Sec. 2. (*a*) In the first place it seems fairly clear that each presentation within consciousness, when considered from a special point of view, is discovered to be describable either as relating to the past, or to the present, or to the future. It is true, of course, that we often experience presentations without appreciating their time relations, just as we experience presentations without appreciating their intensity, or their algedonic quality; but no presentation seems to arise without displaying characteristics which may in any instance lead to the appreciation of some time phase, so that it is then found to display either what we may speak of as presentness, or else pastness, or else futureness.

(*b*) In the second place we note many cases where what we call the same presentation displays the different time phases under different conditions: *e.g.*, this moment's thought, "a game of golf," may have pastness if I played yesterday, or presentness if I am in the midst of the game, or futureness if I am on my way to the golf course. Furthermore there may be a rapid shifting from one time phase to another

without other noticeable change in the presentation: when walking to the golf course the thought, "game of golf," may be placed now in the past, and immediately afterwards in the future.

Again there are cases where, provided we recognise multiple emphases within the same complex presentation, we seem to note all of the time phases together; one being given emphatically, the others dimly: consciousness thus appears as involving a present, together with what Prof. James calls "backward and forward fringes". This would indicate that as each presentation is highly complex, so the parts of the complex may appear in different time phases at one and the same moment; very much as we note summational states of mixed pleasure and pain.

(*c*) But evidently even where this occurs it appears that prominence of one time phase in relation to a given presentation excludes the prominence of either of the other two time phases at the same moment. The same idea cannot be thought of as distinctly present, and at the same moment either as past or future; nor as distinctly past, and at the same moment as present or future; nor as distinctly future, and at the same moment as present or past.

(*d*) It is so clear that past time and future time are appreciated as contradictory opposites, and that present time is as it were a *norm* in relation to which the past and future are estimated, that no further comment is necessary here in relation to this point.

This superficial view serves to strengthen our first suggestion; and evidently makes it worth our while to look into the matter with some care.

II.

Sec. 3. At the very beginning of this inquiry it may be well to say a word to forestall criticism from some reader to whom it may occur that in any discussion of the nature of the time quality we must find ourselves assuming a time series in the objective world, and events in time, and that we shall thus be found to base our explanations upon data which involve the apprehension of time itself.

But we have reason to contend that as psychologists we are fully warranted in this procedure. We assume successive events exactly as we assume the existence of objects in the outer world. All of common speech, and all of scientific expression, involve the assumption of the existence of objects in the outer world, and involve in like manner the assumption

of what we call successions of changes in this outer world of objects. The difficulties referred to are of a metaphysical nature with which the psychologist as such does not directly concern himself. In the words of Dr. James Ward,[1] we "have not to ask how time itself comes to be, but assuming it to be, we ask how the individual comes to know it". Assuming the existence of successive moments of time in the life of a complex neural system, and in that of a coincident consciousness which is a complex psychic system, it is our object to inquire into the nature of the quality given in any special moment, any "now" of this psychic existence, by the fact that this special moment was preceded and will be followed by other special moments, by other "nows".

Sec. 4. Although we might thus waive this difficulty we do not find it altogether necessary to do so. For even though timeness be a general quality of presentations, when it is recognised as such in any of its phases it is appreciated in reflexion as a special "feeling of relation" which is itself a specific form of presentation of the same type as those "feelings of relation" which Dr. James speaks of as the "feeling of *but* the feeling of *and*," etc. When we appreciate the time phase of a given presentation it is because its special "feeling of relation," or "sense of relation" as I prefer to call it, is given at the moment.

When then we assume the existence of successions of presentations we are really experiencing in the "now" a given complex presentation in which we appreciate a number of minor presentations together with a recognition of a relation of succession between them: and evidently when in a specific presentation we have given what we call a series of presentations we are dealing with what is a very different thing from a description of the successive presentations themselves.[2]

[1] *Enc. Britannica*, Art. "Psychology," p. 64. *Cf.* also Dr. Stout in his *Manual of Psychology*, p. 384, where he says: "Without ideal representation there could be no such thing as the definite apprehension of a time series, having a distinguishable beginning and end, connected by a train of intermediate events, each having its own position in the series determined by its relations to other events which come before and after it. For perceptual consciousness it is evident that time cannot exist in this form. On the other hand, we find in perceptual consciousness those primary experiences on which our developed apprehension of time is ultimately based."

[2] For clear statements of this distinction *cf.* Stout, *Manual of Psychology*, p. 385; Royce, *World and the Individual*, ii., p. 115 ff. As Dr. Jas. Ward says (*Enc. Brit.*, Article, p. 66): "On the whole we may conclude that our concrete time experiences are due to simultaneous representations of a series of definite presentations both accompanied and separated by more or fewer indefinite presentations more or less con-

If we refer to three specific presentations, say 1, 2 and 3, we grasp them as a series of any kind in a complex presentation which involves a number of minor presentations or psychic emphases[1] which may be symbolised thus:—

1, plus 2, plus 3, plus { The "sense of relation" which we describe as the relation peculiar to the series.

So of three presentations of successive moments, $\overset{\alpha}{P}$, $\overset{\beta}{P}$, $\overset{\gamma}{P}$, we grasp them as a time series in a complex presentation of multiple emphases which may be symbolised as follows:—

$^{\alpha}p$, plus $^{\beta}p$, plus $^{\gamma}p$, plus { The "sense of relation" which we describe as the relation involving pastness, presentness, or futureness as the case may be.

It would appear then that the pastness of a given presentation is appreciated because of the emphasis of a certain specific sense of relation; and that presentness, and futureness, are appreciated because of the emphasis of certain other but closely related senses of relation: and we thus see that in this study we are dealing altogether with an analysis of what we assume may be certain aspects of all forms of presentation.

III.

Sec. 5. In undertaking this inquiry we must note certain points of significance which require full explanation if we are to maintain our hypothesis that the appreciation of time is due to the existence of a general three-phased quality which exists in one phase or another in connexion with each presentation.

In the first place it will be necessary to account for the fact briefly referred to above that while from one point of view each presentation in a given moment is appreciated as in a sense qualified by one, and only one, of the three time phases; nevertheless from a certain other point of view every

fused; that, further, the definite presentations have certain marks or temporal signs due to the movement of attention; that the rate of these movements or accommodations is approximately constant; and that each movement itself is primarily experienced as an intensity".

[1] As I have elsewhere stated; if the action of the nervous system as a whole is considered in any given moment, inasmuch as each nerve part is in some measure active, what we call special activities may well be described as neururgic emphases; and the presentations which correspond with these neururgic emphases may well be described as psychic emphases within the whole complex psychic system,—*i.e.* the consciousness,—of the moment. I use the word neururgic here, as I have in previous articles, with the meaning "relating to the activity of nerve".

presentation which is distinctly recognised as present,—as qualified by presentness,—has attached to it also something of both pastness and of futureness in what Dr. James calls the "backward and forward fringes".

It is this experience which leads us to describe consciousness as a whole as a stream,[1] in part ever flowing towards us, in part being with us, in part ever flowing from us: a stream which appears constantly to leap as does a torrent over a brink, from which it approaches us, and as constantly passes us by and flows away like a river across a broad plain until it is lost in the vague horizon mists.

Sec. 6. We are thus brought to the consideration of a second point of great interest which also demands explanation.

In speaking of consciousness as a stream we are using spatial terms, and when we come to think of it we find that we are in the habit of thus employing spatial terms constantly in our references to the several time phases. The past is felt to be fittingly described as that in our experience which is going from us; the future as that in our experience which is coming to us; the present as that in our experience which is here with us.

This use of terms would surely seem to indicate that the form of presentations which is given when we recognise pastness, is given with especial emphasis in connexion with our perceptions of objects in the outer world from which we are being separated; that the form which is given when we recognise futureness, is given with especial emphasis in connexion with our perception of objects in the outer world to which we are approaching, or which are approaching us; and that the form which is given when we recognise presentness, is one which is emphasised when objects in the outer world which attract our notice are in a stationary relation to us. The significance of this point will appear as we proceed.

Sec. 7. We may note here also another point of importance in this connexion, *viz.* that this time stream moves always in one direction.

As we have seen above, in considering in reflexion the time quality as a whole we are dealing with the appreciation of the characteristics of a series of presentations in one complex presentation. Now spatial series, for instance, when thus studied may be considered equally well from right to left or from left to right, up and down or down and up. But such is not the case with the time series.

[1] *Cf.* W. James, *Psychology*, vol. i., ch. ix.

And evidently as Prof. Royce says "this direction of the stream of time forms one of its most notable characteristics". Even when we consider reversible spatial series, through them all appears the temporal characteristics of the stream of presentations itself which is always in our direction and irreversible. When we contemplate such series as the spatial series we feel no sense of aid or opposition in them due to the existence of a steady current; but when we contemplate the time series we always appreciate the influence of a current moving steadily and inevitably in one direction, with which we move easily, against which we must struggle if we are to maintain our position.

Sec. 8. Finally we are here led to note another point which appears upon careful study and which has especial significance, *viz.* that the several time phases, even what we call the present, alway appear, in a "now," as related to what we in reflexion perceive to be really not of the present, but of the just past. Even our every day "present" is really a secondary presentation or revival; it is a state of reflexion in a given "now" upon what is a just-gone; and this fact has led Mr. E. R. Clay to describe what we in common language call the present as a "specious present". In what follows when I speak of presentness, or of the present, I refer to this form discovered in revivals, *i.e.* to what we would call in Clay's phraseology "specious presentness" and the "specious present," and do not refer to the "now" of experience in which this is appreciated.

Sec. 9. The fact referred to in section 7, *viz.* that the time series moves in one direction only, and that this direction of the flow is irreversible, would seem to indicate that the three time phases are due to modifications of one general characteristic of successive presentations as these are appreciated in a complex presentation of reflexion.

The fact referred to in section 8, *viz.* that all presentations upon close inspection appear to be relegated to the past, surely means that the pastness sense of relation is more pervasive than the presentness or futureness senses of relation; and this would seem to imply that in pastness we have the general characteristic of successive presentations referred to in the preceding paragraph; and that in considering the time quality we are dealing with a general typical form of all presentations which is markedly emphasised in those cases in which distinct pastness is recognised; which is not thus emphasised in those cases in which presentness (or "specious presentness") is recognised; and which is considerably modified in those cases in which futureness is

recognised. For such a typical form of all presentations which is thus modified when the time phases are definitely appreciated we may well make search.

IV.

Sec. 10. It is evident from what we have just said that we are likely to be repaid by a careful examination of the characteristic of pastness which is evidently a more pervasive form of presentations than either presentness or futureness.

When we study pastness with care we note one characteristic of it which is worthy of our consideration, *viz.* the fact that it is always connected with a reduction of presentative complexity. As Herbert Nichols well says:[1] "In order to perceive Past, some sensation or image must cease; whenever any such ceases, we perceive Past. The ceasing of the perception is the perception of Past; did no perception ever cease we should never perceive or know anything whatever regarding Past, or pastness, or about the Past. . . . For any apperception of Past the cessation of some sensation or image must call up some idea of Past, of something ceasing."

We are thus led to see that the nature of the complexity of successive presentations may well be of importance in relation to the existence of the time quality and of its special phases. Let us then turn for a moment to the consideration of this presentative complexity in itself.

Sec. 11. All presentations of reflexion are as we all agree of a highly complex nature, corresponding with complex emphases within the neururgic system. This complexity is partly due to the fact that the neururgic system is acted upon by a variety of stimuli at the same time; but clearly it is principally due to the fact that this neururgic system is acted upon by a variety of stimuli in successive moments, the effects of one moment's stimulations still persisting as minor neururgic emphases, in moments when new stimulations are giving rise to other and new neururgic emphases.

A specially important mode of this neururgic complexity is given in the fact that the human animal lives in an environment of never-ceasing change, in which there is a constant alteration of the position of the sources of stimulation in relation to the human body, either through the movement of these sources of stimulation in relation to the man, or through the man's own movements in relation to his surroundings; these changes of relative position involving great

[1] *Psychology of Time*, p. 123.

diversity in the power and nature of the stimuli which reach the man's body. Countless sources of stimulation are thus always coming nearer to him and thus becoming more effective to produce minor neururgic emphases within the whole major emphases; and countless other sources of stimulation are always being separated from him and thus becoming less effective to produce these minor neururgic emphases.

It is clear then that if the "neururgic patterns"[1] in man are considered as wholes they must display constantly varying modes of complexity which are determined by the fact that the important sources of stimulation are either coming nearer to him; or are approximately stationary in relation to him; or are becoming separated from him. That is to say, if we view successive neururgic patterns in comparison, they clearly must display either:—

(1) A developing complexity due to the man's approach to effective sources of stimulation, or to their approach to him; or else

(2) A stationary condition of complexity due to his retention for the moment of a fixed relation to these effective sources of stimulation; or else

(3) A simplifying complexity, due to his departure from the effective sources of stimulation, or to their departure from him.

It seems clear also that these characteristics of relative complexity which are so important to the inception of activities in the nervous system must, in consequence of the retentiveness displayed by neururgic systems, also be displayed in all forms of successive neururgic patterns if they are viewed in comparison: so that if we thus view successive neururgic patterns we must in all cases find their emphases displaying what we may call a characteristic of a three-phased nature, involving

(1) Either a developing complexity, or
(2) A stationary complexity, or
(3) A simplifying complexity.

It furthermore appears that any two successive neururgic patterns, if taken as wholes, when viewed in comparison must frequently display very distinctly one of these phases of this characteristic of three-phased nature; and that they cannot in any given moment display more than one of them thus distinctly. If the relation here referred to is noted at all, the successive neururgic patterns must display either a

[1] *Cf.* my articles in this Journal, N.S., No. 44, p. 479 ff., and N.S., No. 57, p. 62 ff.

developing, or a stationary, or a simplifying complexity; and they cannot display very markedly one of the three without the preclusion of the appearance of the other two.

This characteristic given to primary neururgic patterns originally by the form of environmental stimuli will evidently be maintained in all reverberations of these primary complex reactions. We must thus have given a characteristic of all neururgic patterns which will involve three phases; a norm, as it were, and departures in one of two opposite directions from this norm: and we note that this norm will be brought into greatest prominence when the man is effectively stimulated by objects which are stationary in relation to him; while the departures from this norm will be brought into greatest prominence when the man is effectively stimulated respectively by objects coming towards him, and by objects which are moving from him.

Sec. 12. If there is any truth in the hypothesis of a thoroughgoing neururgic and noetic correspondence, then surely we should expect to find in consciousness some general characteristic or quality of presentations corresponding with this three-phased characteristic of neururgic emphases. We should expect to find in all presentations as viewed in retrospect a quality dependent upon their developing, or stationary, or simplifying complexity; a quality of such a threefold nature that (1) one of the three forms of the quality must appear in relation to each complex presentation if considered in reflexion; (2) that, under the proper conditions, any one of the three forms may appear; and (3) that the emphasis of one form must necessarily preclude the emphasis of either of the other two, if the field of presentations is considered as a whole.

Moreover if such a general quality of presentations exists, we clearly might expect to find ourselves picturing it to ourselves in terms of our spatial conceptions: for although if looked for it would be always observable, it would correspond in its most emphatic forms with our movements in relation to objects in space, or with their movements in relation to us, these spatial objects being so far the most effective sources of emphatic presentations that we always tend to describe our experience in spatial terms.

The question we then find ourselves asking is whether we note in reflexion any general quality of presentations of a three-phased nature which we habitually describe in terms which have special relation with objects coming to us, or with those stationary in relation to us, or with those going from us: and we at once agree that we do observe what

may be called such a three-phased general quality in the Time Quality, which must always appear either in the form of pastness, or presentness, or futureness; and which as we have seen is most commonly described in spatial terms: pastness being thought of always as involving something going from us; presentness as involving something with us; futureness as involving something coming towards us.

Sec. 13. It may possibly appear to some reader that this theory might be put to a crucial test by producing, by mechanical means, increases and decreases of presentational complexity, and observing whether or not the appreciation of futureness and of pastness respectively are noticeable in reflecting upon the presentations thus given. And it might be claimed that such changes of perceptual complexity do not self-evidently involve such distinct recognition of what we might expect to be their appropriate time phases.

But it is to be noted that artificially produced increases and decreases of the complexity of stimulations from objects in fixed relation to us do give us respectively a sense of coming to us, and going from us: instance the effects of musical *crescendos* and *decrescendos*, and of growing and waning intensities of fixed lights. And as we have seen the coming to us aspect of presentations is closely related to futureness, while their going from us aspect is closely related to pastness.

Beyond this however it is to be noted that such conditions of experiment as we here refer to would give rise to attention to perceptual presentations due to objects before us, which we have become accustomed by an immense body of experience to identify with the "now-here" from which futureness and pastness are excluded. Furthermore there is ground for holding that the variations in complexity with which futureness and pastness are identified are mainly those in the realm of secondary presentations which do not include the primary presentations of perception such as are involved in the cases of the supposed experiment of mechanically induced increases and decreases of complexity.

V.

Sec. 14. Let us now attempt to symbolise in formulæ the nature of typical presentations in general, and of those special presentations in which the time relations become explicit, to see whether the conception of the relation of the time phases to presentative complexity is corroborated by such a consideration.

A.

In an article entitled "Presentation and Representation" already published in this Journal (N.S., No. 57), I have noted (sec. 12) that the simplest conceivable neururgic emphasis in the adult man is given if one supposes himself aroused from a deep slumber, say by a crash of thunder or by a glare of light. The deep slumber involves as close an approximation as is possible for the adult man to a dead calm on the neururgic wave surface which we have used as a simile; and upon this relatively calm surface appears suddenly a high wave.

This high and practically isolated wave on the neururgic surface involves a marked psychic emphasis or presentation within consciousness; and this, as we have seen in the article above referred to, may be represented by the symbol [1]

$$(A)\ \left\{\begin{matrix} {}^{a}P^{1-2}{}_{-}{}^{3^{o}4_{o}5\times 6} \\ {}^{a}p^{1-2}{}_{-}{}^{3^{o}4_{o}5\times 6} \end{matrix}\right\}.$$

For, as the reader will recall, we have seen reason to believe that each primary presentation or impression (${}^{a}P^{1-2}{}_{-}{}^{3^{o}4_{o}5\times 6}$ in the above symbol) has bound up with it what would be a secondary presentation, or image (${}^{a}p^{1-2}{}_{-}{}^{3^{o}4_{o}5\times 6}$ in the above symbol) if the direct action upon us from the environment were lacking. He will also recall that the psychic system tends to absorb, as it were, the psychic emphases or presentations which accrue to it, and this results in the gradual disappearance as partial presentations from moment to moment of the less marked minor emphases in any given complex presentation, until finally it as a whole disappears as a presentation. This leads us to symbolise any special presentation in three successive moments, two of which follow an impression in moment 1 which is lacking in moments 2 and 3, by the symbols

$$(A)\ \left\{\begin{matrix} {}^{a}P^{1-2}{}_{-}{}^{3^{o}4_{o}5\times 6} \\ {}^{a}p^{1-2}{}_{-}{}^{3^{o}4_{o}5\times 6} \end{matrix}\right\};$$

$$(B)\quad {}^{a}p^{1-2}{}_{-}{}^{3^{o}4_{o}5};$$

$$(C)\quad {}^{a}p^{1-2}{}_{-}{}^{3^{o}4_{o}}.$$

[1] For the convenience of the reader I would remind him that the large *P's* symbolise any primary presentations or impressions: the small *p's* symbolising the corresponding secondary presentations, or so-called representations or images. The Greek letters over the *P's* and *p's* indicate that the presentation of any moment differs from what we call the same presentation of the previous moment, in that the noetic pattern of

If however the emphatic stimulation continues during the three successive moments, then the presentations of the three moments, as we have already seen, may be symbolised as follows:—

$$(1)\ \left\{\begin{matrix}{}^{\alpha}\mathrm{P}^{1-2_3^{\circ}4_{\circ}5\times 6}\\ {}^{\alpha}p^{1-2_3^{\circ}4_{\circ}5\times 6}\end{matrix}\right\};$$

$$(2)\ \left\{\begin{matrix}{}^{\beta}\mathrm{P}^{1-2_3^{\circ}4_{\circ}5\times 6}\\ {}^{\beta}p^{1-2_3^{\circ}4_{\circ}5\times 6}\end{matrix}\right\};\ {}^{\alpha}p^{1-2_3^{\circ}4_{\circ}5}.$$

$$(3)\ \left\{\begin{matrix}{}^{\gamma}\mathrm{P}^{1-2_3^{\circ}4_{\circ}5\times 6}\\ {}^{\gamma}p^{1-2_3^{\circ}4_{\circ}5\times 6}\end{matrix}\right\};\ {}^{\beta}p^{1-2_3^{\circ}4_{\circ}5};\ {}^{\alpha}p^{1-2_3^{\circ}4}.$$

If now a total darkness ensues in moment 4; and if in this moment we reflect upon the presentation 3 as a whole, and discern in it some special character, we may symbolise the presentation of moment 4 as follows:—

$$(4)\ {}^{\gamma}p^{1-2_3^{\circ}4_{\circ}5};\ \text{plus}\ {}^{\beta}p^{1-2_3^{\circ}4};\ \text{plus}\ {}^{\alpha}p^{1-2_3};\ \text{plus}\left\{\begin{matrix}\text{a ``sense of relation'' determined by the nature of the presentations } {}^{\alpha}\mathrm{P},\ {}^{\beta}\mathrm{P} \\ \text{and } {}^{\gamma}\mathrm{P}.\end{matrix}\right.$$

Formula 3, as representing the simplest possible state of adult experience, has already been given on page 73 of my article on "Presentation and Representation" already referred to, and as we there saw may be looked upon as typical of all presentations. *It will be noted that it involves a simplification of complexity in the several minor emphases,* ${}^{\gamma}p$, ${}^{\beta}p$ *and* ${}^{\alpha}p$.

Sec. 15. Now all sorts of presentations occur which have all sorts of emphatic forms; and it is not difficult to show that if we use similar symbols the form of the presentation of reflexion upon a state occasioned by a powerfully stimulative object which is moving from us is one in which the typical form of all presentations given in 3 above is very much emphasised.

If a powerfully stimulative object is moving from us the effect of this separation from the object must be to obliterate from moment to moment the efficiency of certain of the

each moment is affected by the fact that previous noetic patterns have existed. The numbers indicate the minor emphases within the total psychic emphasis *P*, the marks between the numbers indicating relations of any nature which may happen to exist between these minor emphases.

elements of the stimulus coming to us from the object; and correspondingly certain partial presentations within the complex presentation must disappear from moment to moment. That is to say, the simplification of complexity observable in *all* presentations of reflexion, as typified in formula 3, will be greatly emphasised when we perceive objects which are moving from us, or from which we are moving.

If we assume that the flash of light by which the man is awakened from deep sleep is moving rapidly away from him, the presentations of three successive moments may be symbolised as follows:—

$$(1a)\ \left\{\begin{matrix}{}^{\alpha}\mathrm{P}^{1-2-3^{4}o5\times 6}\\ {}^{\alpha}p^{1-2-3^{4}o5\times 6}\end{matrix}\right\};$$

$$(2a)\ \left\{\begin{matrix}{}^{\beta}\mathrm{P}^{1-2-3^{4}}\\ {}^{\beta}p^{1-2-3^{4}}\end{matrix}\right\};\ {}^{\alpha}p^{1-2-3^{4}o5}.$$

$$(3a)\ \left\{\begin{matrix}{}^{\gamma}\mathrm{P}^{1-2}\\ {}^{\gamma}p^{1-2}\end{matrix}\right\};\ {}^{\beta}p^{1-2-3};\ {}^{\alpha}p^{1-2-3^{4}}.$$

Here the "dropping out" due to the separation from us of the stimulating object is symbolised by omitting the figures 5 and 6 in connexion with ${}^{\beta}_{\beta}\mathrm{P}$, and the figures 3 and 4 in connexion with ${}^{\gamma}_{\gamma}\mathrm{P}$.

If then we reflect upon this state (3*a*) as a whole (if we state this in a form related to the serial arrangement of the occurrence[1]) we have

$$(4a)\ {}^{\alpha}p^{1-2-3},\ \text{plus}\ {}^{\beta}p^{1-2},\ \text{plus}\ {}^{\gamma}p^{1},\ \text{plus}\left\{\begin{matrix}\text{the "sense of relation" determined by the nature of}\\ \text{the three partial emphases}\\ {}^{\alpha}p,\ {}^{\beta}p,\ {}^{\gamma}p.\end{matrix}\right.$$

But it is to be noted that this formula is exactly correspondent with the typical formula (4) given above representative of the nature of all presentations in reflexion; except that in the latter case (4*a*) the simplification of complexity would appear as greatly emphasised in relation to any revival of the original presentation

$$\left\{\begin{matrix}{}^{\alpha}\mathrm{P}^{1-2-3^{4}o5\times 6}\\ {}^{\alpha}p^{1-2-3^{4}o5\times 6}\end{matrix}\right\}.$$

[1] The fact that in this symbolisation the simplification appears in (4*a*) in a form which, so far as the Greek letter distinction is concerned, is inverted (see (4)) is of no significance, inasmuch as each of the minor emphases ${}^{\alpha}p^{1-2-}$, and ${}^{\beta}p^{1-2}$, and ${}^{\gamma}p^{1}$, is appreciated in one and the same moment, as inherent in one more complex emphasis.

Sec. 16. What this means then is that a form determined by simplification of complexity is given in *all* presentations; which form is given very emphatically whenever we experience those special presentations due to objects which are being separated from us: and we thus see that it is most natural for us to describe this general characteristic of all presentations in terms used to describe the emphatic form of presentations due to our perception of objects moving from us: we may therefore quite naturally describe this general characteristic of all our presentations as viewed in reflexion by saying that they always have a "going from us" aspect.

But as we have already noted, we do experience emphatically very frequently a form in presentations which we commonly describe as giving to them this "going from us" aspect, *viz.*, the temporal form which leads us to speak of the presentation in connexion with which it appears as related to the past.

It would thus appear that the temporal form which we designate as pastness is one given as, or in indissoluble relation with, the simplification of complexity in the whole complex presentation of reflexion.

It would appear also that while this characteristic of simplification of complexity, which we recognise as pastness, is given in connexion with all of our presentations within consciousness as viewed in reflexion, nevertheless it is given more emphatically in connexion with presentations which involve the distinct recognition of pastness. The characteristic which when emphatic we speak of as the going from us aspect,—the pastness quality,—of presentations is in fact of the very essence of the nature of all complex presentations given in reflexion; and it is this fact that leads us to refer to the presentative field in general in spatial terms as a stream ever flowing from us.

We are thus able also to account for the important fact which we describe also in spatial terms when we say that the time series has a movement in one irreversible direction; a fact which we have seen must be taken account of in any adequate explanation of the nature of the time quality. For evidently if all reflexion upon successive presentations involves an appreciation of a simplification of complexity of successive presentations, then when our thought is turned to this aspect of presentations it must be recognised as describable in terms of a stream ever flowing in a given direction, the perception of such a stream necessarily involving an emphasis of this simplification of complexity within the given presentations.

Sec. 17. We thus see clearly also the ground in experience for the distinction between the "now" and the "specious present" of which we have above spoken.

As all presentations as viewed in reflexion involve a simplification of complexity as indicated in our typical formula 3 above, so must that special type of presentation which is conceived of as existing in the present moment, the nature of which we shall presently consider. In contrast with those presentations in which this simplifying complexity is much emphasised, in which therefore marked pastness is displayed, this so-called present stands out as unique, and is spoken of as the "present". But careful observation shows us the existence of this moving from us aspect even in connexion with such presentations, and under close scrutiny we find the present of reflexion in reality qualified with pastness as all other reflective presentations are, and see that it is in reality a "just gone," and is not the *now* but a "specious present".

Sec. 18. Those of my readers who have followed my thought in the article on "Presentation and Representation" above referred to, will also now see clearly why it is that what we usually speak of as "representations" must always display an emphasis of this general quality of all presentations, and must always be distinctly pervaded by the pastness phase of the time quality.

B.

Sec. 19. As we have just seen, on top of this ever-moving stream of consciousness, in which pastness is always given, there may appear many minor psychic emphases or minor presentations in various relations; and when these happen to take the form which is emphatically given when distinct objects in space are becoming separated from us this sense of pastness is very marked.

But these psychic emphases in their relations may also happen to take a form which is markedly given when distinct objects in space are moving towards us, or we towards them; and then we would be likely to describe this form as involving a "coming to us" aspect.

In such cases the presentations of three successive moments may be symbolised as per the formulæ below; for it must be assumed that with the approach of an object to us new forms of partial stimulation become effective to produce new partial psychic emphases in the complex presentation of the moment.

(5) $\left\{\begin{matrix} {}^{\alpha}P^{1-2-3^{\circ}4\circ5\times6} \\ {}^{\alpha}p^{1-2-3^{\circ}4\circ5\times6} \end{matrix}\right\}$.

(6) $\left\{\begin{matrix} {}^{\beta}P^{1-2-3^{\circ}4\circ5\times6\times7} \\ {}^{\beta}p^{1-2-3^{\circ}4\circ5\times6\times7} \end{matrix}\right\}$; ${}^{\alpha}p^{1-2-3^{\circ}4\circ5}$.

(7) $\left\{\begin{matrix} {}^{\gamma}P^{1-2-3^{\circ}4\circ5\times6\times7+8} \\ {}^{\gamma}p^{1-2-3^{\circ}4\circ5\times6\times7+8} \end{matrix}\right\}$; ${}^{\beta}p^{1-2-3^{\circ}4\circ5\times6}$; ${}^{\alpha}p^{1-2-3^{\circ}4}$.

Here the newly-accruing psychic emphases are indicated by the addition of $\times 7$ in (6), and of $\times$ 7 and $+8$ in (7).

These formulæ (5, 6, 7) may then be taken to represent the emphatic form involved in the presentations of reflexion whenever we perceive objects approaching us; and this may be described as the "coming to us" aspect of the perceptual presentation. But as we have already noted we find that we always attribute this "coming to us" aspect to the temporal phase of presentations which we describe as their futureness; and we may therefore assume that futureness is determined by the existence of this form in the presentation whether it is perceptual or not.

If then we reflect upon this state (7) as a whole (if we put this in a form related to the serial arrangement of the occurrence) we have,

(8) ${}^{\alpha}p^{1-2-3}$, plus ${}^{\beta}p^{1-2-3^{\circ}4\circ5}$, plus ${}^{\gamma}p^{1-2-3^{\circ}4\circ5\times6\times7}$, plus { the "sense of relation" determined by the nature of the three partial emphases ${}^{\alpha}p$, ${}^{\beta}p$, ${}^{\gamma}p$.

The formula (8) then, as a whole, may be taken to represent presentations in which the coming to us time phase, *i.e.* futureness, is emphatic.

But if we examine this formula (8) we note that it involves in a marked form a developing complexity.

This becomes clear by placing the comparable parts of the formula (4*a*) and (8) in conjunction.

(4*a*) Simplification of Complexity:—

${}^{\alpha}p^{1-2-3}$, plus ${}^{\beta}p^{1-2}$, plus ${}^{\gamma}p^{1}$—Pastness.

(8) Development of Complexity:—

${}^{\alpha}p^{1-2-3}$, plus ${}^{\beta}p^{1-2-3^{\circ}4\circ5}$; plus ${}^{\gamma}p^{1-2-3^{\circ}4\circ5\times6\times7}$—Futureness.

It would thus appear that the temporal form which we designate as futureness is one given in, or in indissoluble relation with, the development of complexity in the whole complex presentation of reflexion.

This seems the more probable because the temporal phase which we speak of as futureness has a characteristic which

has been aptly described by Dr. James as "budding". But a still stronger corroboration of this view is given in the fact that futureness is always thought of as diametrically opposed to pastness; and as we have seen above the pastness temporal phase seems to be related to a simplification of complexity, which is diametrically opposed to the development of complexity which we here suggest as the form to which our appreciation of futureness is due.

C.

Sec. 20. We have thus attempted to explain the appreciation of pastness and of futureness as being due to a recognition respectively of the simplification and of the development of complexity in successive presentations. If this explanation is in any respect adequate, it is easy to see that a special quality will be given to any presentations in which both the marked simplification and the marked development of complexity are lacking, and in which a relatively unchanging complexity is maintained. Inasmuch as all presentations of necessity involve forms displaying simplification of complexity, an appearance of unchanging complexity can only be given by artificial means, so to speak, such as are given by continuous emphatic stimulations reaching us in connexion with unchanging objects in fixed spatial relation with our bodies.

Now just such conditions give us our appreciation of emphatic presentness in connexion with emphatic perceptual experiences of outer world objects, and lead us to describe the presentness qualification of our presentations as the "now-here" aspect. Our experience of these presentations therefore accords well with our theory.

As we have already seen, all presentations as viewed in reflexion are really qualified by a measure of pastness due to the fact that the very nature of all such presentations involves simplification of complexity which carries with it this pastness qualification: and this is true then even of those presentations which are emphatically qualified by presentness. It is thus clear how it happens that in viewing presentations as a whole we note that the presentations displaying presentness—*i.e.* what we call the present—are in reality just gone in relation to the "now" of experience,—how it happens that we come to see that this present is not what we mean when we speak of the "now," but what Clay has called a "specious present".

Sec. 21. In the complex presentations of any moment of

reflexion there must always exist a present, this as we have seen being for the most part determined by the momentarily existing environmental stimulations. This ever existing presentness serves as a *norm* with which we compare the time quality of any particular partial psychic emphasis within the whole complex emphasis which gives character to the noetic pattern of the moment. As Bradley[1] well says: "We are aware of and think of the past as past always by an ideal construction from the present, and the immediate presentation of the past as such would be a gratuitous miracle". The same may be said of our conception of the future.

The general time quality as viewed in the presentations of reflexion must always show the passing away or pastness phase, which must appear as such in contrast with this "specious present" of the moment's unchanging complexity; for apart from the existence of such a present of relatively unchanging complexity we could not apprehend by comparison the cessations which pastness involves—the simplification of the complexity in parts of the complex presentation.

But in connexion with all of our complex presentations there is always also some measure of "budding"—of futureness. This futureness when apprehended also appears as such in contrast with the "specious present" of the moment's unchanging complexity; for again apart from the existence of such a present of relatively unchanging complexity we could not apprehend by comparison the "budding," which futureness involves—the development of the complexity in parts of the complex presentation.

But if this is true it is also true, on the other hand, that this presentness itself appears as such only by contrast. As James Ward well says:[2] "The present alone, and life as a succession of presents, or, in other words, continuous occupation with impressions, give us no knowledge of the present as present. This we first obtain when our present consciousness consists partly of memories or partly of expectations (states in which pastness or futureness respectively are preeminent, H. R. M.) as well."

Sec. 22. This "specious present" is thus as it were a mere place of transition in the stream, where the futureness phase passes over into the pastness phase, where the complexity appears as neither developing nor simplifying. It is true that this "specious present" is never clearly apprehended as a *line* of transition; and so it is true, as Prof. James says, that we apprehend the "present" not as a knife

[1] MIND, N.S., 30, p. 152. [2] *Enc. Brit.*, Art., p. 64.

edge but rather as a saddle-back with "fringes"—*i.e.* not clearly apprehended parts—spreading out on the one hand into the futureness and on the other hand into the pastness.

This is especially interesting as it shows the close relations between the algedonic and the time qualities, in the fact that the algedonic *norm*, *viz.* indifference, like the temporal norm, *viz.* presentness, displays this more or less of indefiniteness, so that indifference too may be described better as a saddle-back than as a knife edge, much that we speak of as indifference being tinged with what we may also call a pleasure fringe and a pain fringe.

VI.

Sec. 23. From our study in the preceding division it would appear that the recognition of the time phases is due to the relative complexity of successive presentations as this is appreciated in a complex presentation of reflexion which embodies the relation between these successive presentations. Or if this seems to be going too far it may at least be well claimed that these time phases are determined by some characteristic of such reflective presentations which varies to all intents and purposes directly with variations of this complexity.

If this is the case then certainly the time phases must be phases of a general quality of all presentations determined in nature by the complexity of psychic emphases; and it will be worth our while in closing to pass in review the characteristics of these temporal phases in order to see how far it is possible to account for them under this psychological hypothesis.

Sec. 24. The Time Quality then appears to be a general quality of all presentations as viewed in reflexion,[1] and of a three-phased nature, one phase of which must, any one of which under proper conditions may, and no two of which may at the same time, be emphatic in connexion with any special psychic emphasis or presentation. That is each specific presentation must display either marked pastness, or presentness, or futureness; and under the proper conditions it may display either of the three; but if it displays a marked pastness it cannot in itself display marked presentness or futureness, if it displays a marked presentness it cannot in itself display marked pastness or futureness, and if it displays a marked futureness it cannot in itself display marked pastness or presentness.

[1] *Cf.* Münsterberg, *Grundzuge d. Psychologie*, pp. 320-330; whose argument implicitly involves the position here maintained.

Sec. 25. In order to avoid misconstruction of the above statement it must at once be noted that we have thus spoken of specific presentations. But as we have said, our presentations may well be described as psychic emphases, and in ordinary experience these psychic emphases display complexes of minor emphases within the major emphasis; our field of presentation taken as a whole is a complex of more or less clearly differentiated minor presentational parts, each of which so far as differentiable has its specific character. Hence we might expect when we consider experience as a whole in reflexion to find that it always displays some pastness, some presentness, some futureness; one of the three phases being usually more emphatic than the others as one of the partial presentations in the whole complex is more emphatic than the others.

It is this experience which leads us, as we have seen, to describe experience as a whole as a "stream," in part ever flowing toward us, in part being with us, in part ever flowing away from us: a stream which appears constantly to leap over a brink from which it approaches us, and as constantly to pass us by, and to flow away like a river across a broad plain. At each moment the broad field of presentations has in it something of futureness (*i.e.* some parts in which there is a relative development of complexity); something of presentness (*i.e.* some parts in which there is a relatively stationary complexity); and something of pastness (*i.e.* some parts in which there is a relative simplification of complexity).

Sec. 26. At the same time we can scarcely expect to find any moment of experience in which one of the three phases, either the pastness, or the presentness, or the futureness, is not markedly predominant.

A. When the most emphatic part of the noetic pattern under consideration displays marked futureness we speak of the whole presentation as relating to the future, although in it as a whole exists something of presentness and of pastness. When, for instance, I think of the next President of the United States, in the presentation as a whole there is an emphasis of futureness; and yet there is not lost a sense of presentness, not only in the fact of the appearance of a new partial emphasis arising in correspondence with the moment's environmental stimuli, but also in the fact that there exists dimly the minor partial presentation "a President now existing"; nor is there lost a sense of pastness, in the vague cognisance of the nature of Presidents as they have existed for over 100 years. In such a case, however, this presentness and pastness are all in the background, and we think of our

next President as in the future; the presentation or psychic emphasis as a whole has futureness.

B. When the most marked part of the noetic pattern under consideration is that part which displays marked presentness we speak of the whole presentation as "the present". And in the vastly large proportion of the moments of life this is the experience which is emphatic; and this because the influences of environmental stimuli are so usually forceful and persistent. The page which you now read has this presentness for you; but within the complex presentation of this moment a minor emphasis of what you have just read is passing away, as we say in our spatial terms; *i.e.* this minor emphasis has the quality of pastness, it is fading off into what Dr. James calls the "backward fringe". At the same time the end of the sentence that I am beginning, the bottom of the page you are approaching, are "budding" as minor presentations, as minor emphases within the whole noetic pattern of the moment; and so far as they are presented at all they have the quality of futureness; this is what Dr. James calls the "forward fringe".

C. When the most marked part of the noetic pattern under consideration is that part which displays marked pastness we speak of the whole presentation as relating to the past. When you think of the first words of this chapter pastness is emphasised; nevertheless you cannot rid yourself of the less emphasised "presentness" of the minor presentations corresponding with the moment's effects of environmental stimuli; nor can you rid yourself of the more or less dim futureness, or "budding," which goes with each moment of existence.

Sec. 27. While there is thus something of pastness, and of presentness, and of futureness, in connexion with all presentations; nevertheless, as we have already said, a marked degree of emphasis of one of the three phases of the time quality in connexion with a definite emphatic minor presentation precludes the emphasis of the other phases. The thought of my grandmother is so distinctly of the past that the presentness and futureness of the total complex presentation of the moment disappear by comparison. The pressure on my tired hand as I write is so distinctly of the present that the pastness and futureness of the total complex presentation disappear by comparison. The thought of our next President is so distinctly of the future that the presentness and the pastness of the total complex presentation disappear by comparison.

Sec. 28. It is equally clear that if conditions are favourable

we may experience any one of these three time phases emphatically in connexion with any given presentation. If as I write I think of Roosevelt, I may think of Roosevelt as Vice-President, and then the presentation is one in connexion with which pastness is predominant; but if I think of Roosevelt as President the presentation is one in connexion with which presentness is predominant; while if I think of Roosevelt as our possible next President the presentation is one in connexion with which futureness is predominant.

Sec. 29. While it is true in general that where a presentation is distinctly qualified by one temporal phase the existence of the other two temporal phases in connexion with it is overlooked; nevertheless our presentations are so complex that they are often more or less clearly separated into minor psychic systems, and thus we not infrequently find various phases of the time quality sufficiently marked to be noted at one and the same time in connexion with slight changes in the nature of a given presentation.

A presentation of practically the same nature may be noted in reflexion as belonging in the past, the present, and the future. For example, we may note our conception of the processes of evolution in the physical world, which we conceive of as *having governed* in the past, and as *being exhibited* in the present, and as *to continue* in the future.

We may note a similar presentation as in the past, and in the present, to the exclusion of the future: as for example when we revisit some haunt of our childhood which we realise we cannot again see in the course of our lives.

We may note a similar presentation as in the present and in the future, to the exclusion of the past; as when one receives an increase of income through the unexpected increase of his salary.

We may note a similar presentation as in the past and in the future to the exclusion of the present; as when, engaged in business, one thinks of his games of golf as played yesterday and to be played to-morrow.

Sec. 30. In certain cases a given presentation of the past, when viewed in the reflective presentation of the moment, may have a characteristic pastness quite apart from the mere pastness involved in the time flow of the moment: this being due to its firm connexion with all that vast field of secondary presentations that are bound by indissoluble bonds to those secondary presentations in which the past-time form is emphasised. I have, for instance, the presentation "my great-great-grandfather". This man is thought of as in the past without any question: yet I have had no experience

of that great-great-grandfather to account for the pastness of the presentation similar to that which enables us to account for the pastness of an event of yesterday, or of last week, which we describe as being due to the holding in mind of a train of secondary presentations, in which if we hold to our special view we can see that decreasing complexity must be a marked characteristic.

It is easy to see that a vast field of secondary presentations must necessarily be attached by inherent bonds to the lately experienced past. This vast field so far as its time quality is emphasised in attention becomes for us *the Past* as a special presentation. Whenever any secondary presentation due to a thought process which is only indirectly the result of experience is found to be indissolubly attached to this vast field which we call *the Past*, then although it may not have in itself the emphatic marks of pastness it nevertheless is identified with *the Past*. The truth of this view becomes clear when we consider the case just referred to. The idea of my father is distinctly part of the experience of my life in which the quality of pastness is emphatic: the idea of my grandfather who died in my childhood is only to a very small degree part of that experience; but the idea of my great-great-grandfather, while having in itself no other pastness than that inherent in the time flow of the momentary presentation, gains its distinct pastness by its inherent attachment to the body of experience in which the quality of pastness is emphasised in reflective attention.

In fact if we note our experience with care we find that an indefinitely small part of the presentations which we call past have anything more to warrant this qualification than this attachment to the inextricably complex web which spreads away from those late experiences, which give us the presentations of the *late past*, in which the form of pastness is emphasised. Even the thought of my father, who died not so many years ago, is I find in no small part merely past in the same sense in which the thought of his great-grandfather is.

Sec. 31. In a similar manner a given presentation, when viewed in the reflective presentation of the moment, may have a characteristic futureness quite apart from the mere futureness involved in the time flow of the moment: this being due to its firm connexion with all of the field of secondary presentations which are bound by indissoluble bonds with those secondary presentations in which the future-time form is emphasised. I think, for instance, of my grandchildren as in the future, and here the development

of the presentation which relates to what is entirely within the possibilities of experience gives without doubt an inherent futureness to the presentation. But when I think of my great-great-grandchildren I think of them equally as distinctly in future time: yet no possible experience to be mine can account for the distinct futureness of this presentation.

It is clear indeed, in a manner similar to that noted in relation to pastness, that a broad field of secondary presentations must attach to the field in which true futureness is emphasised. This field so far as its time quality is emphasised in attention becomes for us *the Future*, as a special presentation.

Whenever any idea is found to be indissolubly attached to this field which we call *the Future*, then, although it may not have in itself the emphatic marks of futureness, it nevertheless is identified with *the Future*. The idea of my grandchildren certainly has some considerable amount of futureness inherently attached to it: but the idea of my great-great-grandchildren can have but little of this inherent futureness, although it is distinctly placed in *the Future*, and that by the process above described. It gains its distinct futureness by its attachment to the body of experience in which the quality of futureness is emphasised in reflective attention. In fact, only an indefinitely small part of the presentations which we think of as in the future have anything more to warrant this qualification than this attachment to the inextricably complex web which is connected with those experiences in which futureness is distinctly emphasised.

Sec. 32. As we have seen, when a presentness is noted it stands always in relation to a futureness or a pastness. In case of such a relation we say "this is a not past," or "this is a not future," "it is the actual present". And here we have no possibility of the attainment of the quality in question by any such indirect process of attachment as is observable with pastness and futureness. The Past is a stream of indefinite dimensions: the Future appears also as a stream, although its extent is less than that of the Past. The Present (the "specious present"), however, is but the cross section of this stream, and as such stands in distinct contrast in this respect with the Past and with the Future.

Sec. 33. It seems clear from what has preceded this, that under our hypothesis the whole presentation of each moment is a complex of mutiple emphases, this being involved with the fact that human consciousness is a highly complex system of psychic systems; and that the form of the presen-

tations within consciousness is determined by the reverberant nature of the coincident activities of complex neural systems, in connexion with the processes which we speak of as physical and psychic assimilation.

I have sought in this article to show that under these conditions these factors, which are always implicated in each moment of consciousness, themselves involve the experience of the time flow; and that this must appear either as pastness, or futureness, or as a somewhat which is a transition between the two, which we call presentness.

Even if it is shown that the suggested relation of the time phases to presentational complexity is unwarranted, nevertheless I think the facts brought out in the course of our investigation have shown conclusively that Timeness is a general quality of all presentations, of a three-phased nature; that in reflexion at least one of these three phases (pastness, presentness, or futureness) must usually be predominant; and that if any one of these three phases becomes predominant as a qualification of any given presentation, this fact necessarily excludes the prominence of either of the other two in connexion with the same presentation.

II.—A CRITICISM OF THE PSYCHOLOGISTS' TREATMENT OF KNOWLEDGE.[1]

By H. A. Prichard.

It is the aim of psychology to study the mind, or, if the mind be considered a 'metaphysical fiction,' consciousness. Its characteristic claim is that it is a science, to be considered, for purposes of education and otherwise, as on a level with the physical sciences. The claim implies that the subject has a subject-matter similar to that of other sciences, and capable of similar treatment; and as the aim of science is to explain, and more especially to explain the later stages of a temporal process by the earlier, the main task of psychology is to explain how the later stages of mental life arise from the earlier. In particular, in the case of knowledge, psychology seeks to show how it is that a life which begins with sensation and feeling comes to acquire the articulated knowledge of the world which we now possess.

Its results are considered not only to be of intrinsic importance but also to bear in an important way on the problems of other subjects, and especially on those of metaphysics. We even find it said [2] that the future of philosophy is obviously with psychology. And appealing, as it contends, to the direct experience of our own mental life, it allows to no other subject a stronger claim to a basis of fact. 'Psychological monstrosity' is a common term of abuse applied to the views of those who do not happen to be psychologists.

Nevertheless the subject appears to rest on presuppositions which have only been accepted, because its exponents have never faced the real problems of the theory of knowledge. The statements of psychologists cannot fail to arouse misgiving in the mind of any one who has not been bred as

[1 I am indebted to Mr. J. A. Smith of Balliol College for valuable criticisms of the draft of this article.]

[2] Mr. Taylor, *International Journal of Ethics*, April, 1896, p. 368.

a psychologist and whose interests are chiefly philosophical. And the defence of a discussion of the psychologists' position by such a one must lie in the conviction that the issues are primarily philosophical and not psychological.

The aim of this article is to consider the attitude of psychologists to knowledge and to contend that it involves certain mistakes of principle which vitiate their treatment of particular problems. It will be argued (1) that they take their stand on a false theory of knowledge; (2) that they ignore the unique character of the subject-object relation involved in knowledge; and (3) that the desire for explanation which prompts their treatment is mistaken.

The data used will be Dr. Ward's article on Psychology in the *Encyclopædia Britannica* and, to a smaller extent, Dr. Stout's *Analytic Psychology* and *Manual of Psychology*. It will be assumed that these works fairly represent the attitude of current psychology. Dr. Ward's article is the better for the purpose, because it is more explicit in disclosing the psychologists' position.

It is obvious that this position can be discovered in two ways. We may appeal to the general statements made by psychologists themselves about the nature of the subject and its relations to other subjects; and we may consider the implications of their treatment of particular problems. Thanks to Dr. Ward's explicitness, it is convenient primarily to adopt the first method and to use the second incidentally.

In discussing the nature of psychology, Dr. Ward begins by pointing out the difficulty of distinguishing it from the physical sciences by reference to any difference of objects. If we say for instance, he urges, that the physical sciences deal with the phenomena of matter, and psychology deals with the phenomena of mind, we are met by the obvious objection that the phenomena of matter are in a sense mental; they are presentations to a subject. From this point of view the object of any physical science appears to fall within the scope of psychology. The conclusion reached is that psychology cannot like mineralogy or botany be defined by reference to a special subject matter. It deals in some sort with the whole of experience: and the difference between it and the physical sciences is one not of objects but of standpoints. The sciences deal with objects in abstraction from the fact of their presentation to an individual subject; psychology deals with them in this relation. Hence Dr. Ward calls the standpoint of psychology individualistic. A sentence of Dr. Ward, which Dr.

Stout quotes with approval,[1] may serve to make the distinction clearer.

"By whatever methods its facts are ascertained, they must—to have a psychological import—be regarded as having a place in, or as being part of, some one's consciousness. In this sense, *i.e.* as presented to an individual 'the whole choir of heaven and furniture of earth' may belong to psychology, but otherwise they are psychological nonentities." This appears to mean that the star Sirius, for instance, if considered in abstraction from its presentation to any individual belongs to astronomy, while if considered as so presented it belongs to psychology.

Dr. Ward proceeds to explain his meaning more fully by distinguishing the psychological from the philosophical standpoint. "Locke, Berkeley and Hume have been of late severely handled, because they regarded the critical investigation of knowledge as a psychological problem, and set to work to study the individual mind simply for the sake of this problem. But none the less their standpoint was the proper one for psychology; and however surely their philosophy was foredoomed to a collapse, there is no denying a steady psychological advance as we pass from Locke to Hume and his modern representatives. By 'idea' Locke tells us he means 'whatsoever is the object of the understanding when a man thinks,' and having, as it were, shut himself within such a circle of ideas, he finds himself powerless to explain his knowledge of a world which is independent of it; but he is able to give a very good account of some of these ideas themselves. . . . Berkeley abolished Locke's hypothetical outer circle. Thereby he made the psychological standpoint clearer than ever; hence the truth of Hume's remark that Berkeley's arguments 'admit of no answer'; at the same time the epistemological problem was as hopeless as before; hence again the truth of Hume's remark that these arguments produced no conviction. Of all the facts with which he deals, the psychologist may truly say that their *esse* is *percipi*, inasmuch as all his facts are facts of presentation, are ideas in Locke's sense. Before we became conscious, there was no world for us; should our consciousness cease, the world for us ceases too. . . .

"Nor are we bound, because we take the individualistic standpoint as psychologists, to accept the philosophical conclusions that have been reached from them, unless indeed

[1] *Analytic Psychology*, vol. i., pp. 9-10; and *Manual of Psychology* (2nd edition), p. 12.

we hold that it is the right point of view for philosophical speculation. A psychologist *may* be an idealist in Berkeley's sense, or in Fichte's, but he need not; he is just as free, if he see reason, to call himself, after Hamilton, a natural realist; only psychology will afford him no safe warrant for the realism part of it."

In these sentences there appears to lurk a fallacy which vitiates in principle the psychologists' treatment of knowledge; but before an attempt is made to show this, it is necessary to carry Dr. Ward's account somewhat farther.

"The problem of psychology," Dr. Ward continues, "in dealing with its complex subject-matter" (*i.e.* everything which is part of some one's consciousness, including the whole choir of heaven and furniture of earth) "is first to ascertain its constituent elements and secondly to ascertain and explain the laws of their combination and interaction." "As to the constituents there is in the main substantial agreement; the elementary facts of mind cannot be expressed in less than three propositions—I feel somehow, I know something, I do something." Dr. Ward goes on to point out that each of these propositions imply a mind or conscious subject, which all psychologists explicitly or implicitly have been forced to recognise. Then after some discussion of feeling and action, he turns to the special case of knowledge.

"We may now try to ascertain what is meant by cognition, or, more exactly, what we are to understand by the term *presentation*. It was an important step onwards for psychology when Locke introduced the new way of ideas. . . . And, indeed, the history of psychology seems to show that its most important discoveries have been made by those who have kept closely to this way of ideas; the establishment of the laws of association and their many fruitful applications and the whole Herbartian psychology may suffice as instances. The truth is that the use of such a term is itself a mark of an important generalisation, one which helps to free us from the mythology and verbiage of the faculty psychologists. All that variety of mental facts which we speak of as sensations, perceptions, images, intuitions, concepts, notions, have two characteristics in common: (1) they admit of being more or less attended to, and (2) can be reproduced and associated together. It is here proposed to use the term presentation to connote such a mental fact, and as the best equivalent for what Locke meant by idea and what Kant and Herbart called a *vorstellung*."

Dr. Ward goes on to point out that a presentation has a twofold relation: (1) to the subject—it is in his mind or pre-

sented; (2) to other presentations—on this depends their revivability and associability. And in fact, and for a reason which will appear subsequently, his account of psychological doctrine in detail is mainly an account of the second relation and its consequences.

It is a commonplace of the theory of knowledge that Locke was committed once and for all to a view which made knowledge impossible by his definition of an idea as whatsoever is the object of the understanding when a man thinks. Berkeley's position is no more successful. Hence it is matter for astonishment that any one who, as Dr. Ward does, accepts these commonplaces should consider the adoption of their standpoint a merit rather than a defect of the treatment of any subject. And it will be well to begin by considering the distinction by which Dr. Ward supports it.

Dr. Ward sharply distinguishes the psychological and metaphysical standpoints; and he holds that we are not bound, because we take the individualistic (*i.e.* the Lockian and Berkeleyan) standpoint as psychologists, to accept the philosophical conclusions that have been reached from it, unless indeed we hold that it is the right point of view for philosophical speculation. And he praises Locke and Berkeley from the point of view of psychology, for adopting a standpoint, which he expressly says makes any solution of the problem of knowledge impossible.[1]

But the question can fairly be asked: 'How can the proper standpoint of one subject possibly lead to false conclusions in another'. If the conclusions really follow from the standpoint and the standpoint is legitimate, the conclusions must be accepted. So long as the conclusions really follow, the nature of the subject within which the argument falls is indifferent. If the conclusion be rejected, it must be allowed that there is something wrong with the standpoint. Two subjects may have different standpoints, but if some conclusion within one subject follows from the standpoint of the other, the truth of the standpoint falls with the fall of the truth of the conclusion. Further, Dr. Ward's admission that philosophical conclusions can be reached from the psychological standpoint implies that the standpoint of psychology lies in a metaphysical position. Metaphysical conclusions

[1] "Locke having shut himself within the circle of his own ideas, finds himself powerless to explain his knowledge of a world which is independent of it; but he is able to give a very good account of some of these ideas themselves. Berkeley made the psychological point of view clearer than ever: at the same time the epistemological problem was as hopeless as before."

must come from metaphysical *ἀρχαί*. And Locke's and Berkeley's positions are obviously metaphysical. Dr. Ward therefore is committed to the view that psychology should be based on a philosophical position which may be false, and in fact is false to any one but a sceptic. This view hardly inspires confidence in the subject, especially when it is remembered that one of the facts to be studied is knowledge and that the standpoint adopted is one which renders knowledge impossible.

Dr. Ward seeks to vindicate the possession by psychology of a standpoint which may be or rather must be philosophically false by pointing out that psychology deals with knowing as it is as a fact in individuals and makes no attempt to consider its correctness. The latter problem presumably belongs to philosophy, though it would more naturally be expected to belong to science. The study however of knowing as a fact of the individual mind does *not* imply a Berkeleyan standpoint. It does not follow from the fact that what is under consideration is *my* act of knowing that my object is something of which the *esse* is *percipi*. Again, though it is possible to disregard the possibility of the processes considered being mistaken in detail, it is not possible to study these processes from a point of view which makes knowledge in principle impossible or even leaves it an open possibility whether knowledge may not be wholly and of its own nature incorrect.

The Lockian and Berkeleyan standpoints and the way in which they enter into and affect psychology may now be considered. It is significant that Dr. Ward does not distinguish them. For in fact they are opposed, even though the one is the logical outcome of the inherent difficulties of the other. Dr. Ward and other psychologists appear to take either standpoint according to the problem with which they happen for the moment to be occupied. If however both are false, the transition is immaterial except on the score of consistency.

Locke's standpoint is summed up in his definition of an idea as 'whatsoever is the object of the understanding when a man thinks'. If this definition were a definition and merely—as, on the face of it, it does—stated the meaning to be assigned to the word idea, it would convey no implication as to the nature of that which was the object of the understanding. But the word idea, in its ordinary meaning, implies the antithesis of something mental to something non-mental or real. And that is why Locke used it, for his general view was that the object of the mind, *i.e.* what the mind thinks of or apprehends, is not the reality but an idea

of it, *i.e.* a modification of the mind itself. That this general view influenced his definition is shown by the fact that, in the very sentence in which the definition occurs, he goes on to say that he has used the term to express what is meant by phantasm, notion, species, or whatever it is which the mind can be employed about in thinking. It follows that his definition in reality is not a definition of the term idea but a covert assertion of his general view that the object of the mind is not reality but its own ideas, which therefore form a veil or screen between the mind and reality.

The suicidal character of the view is rendered obvious by the reflexion that it renders reality inaccessible. It confines us entirely to our own mind, which, whatever else it is, is not what we wish or suppose ourselves to know as the real. And the counter position to be asserted against it surely is that the mind's relation to reality in knowledge is direct or immediate. When, as it is said, we perceive a chair or a tree, the direct object of the mind is the chair or the tree, and not any mental modification referred to as a 'perception' or an image of it. When we reflect about triangles it is not our notion or concept of triangularity of which we think or are aware, but triangularity itself. The concept of triangularity is merely a psychological fiction, and triangularity is not 'mental' in the sense that its reality disappears upon the withdrawal of the awareness of it.

The untenability of Locke's position drove Berkeley into Berkeleyanism. He naturally discarded Locke's 'reality' as inaccessible to the mind; and in essentials his conclusion was that our knowledge consisted in the knowledge of the successions of our own perceptions, the perceptions being really conceived to have the kind of reality which belongs to sensations. Even if this statement does not fairly represent his view, it represents the inevitable outcome of it, usually known as subjective idealism, and in any case it represents Dr. Ward's interpretation of Berkeley for purposes of psychology.

For the present purpose, the point common to Locke and Berkeley is that the immediate object of the mind is, in Locke's sense of the word, idea, *i.e.* something mental. To this view Psychology always adheres. The point of difference is, while Locke presupposed that reality proper was something distinct from our ideas, Berkeley limited reality to the 'ideas' themselves. In this respect psychology appears sometimes to adhere to the one view and sometimes to the other.

Before, however, psychology itself is considered, there is a

further point to be dealt with, connected with Berkeleyanism and kindred views. Berkeleyanism, or what some may prefer to call subjective idealism, holds that all reality is mental, in the sense in which anything is called mental which is held to disappear with the disappearance of the mind to which it relates. It thus reduces the reality of the physical world to the level of a sensation or a feeling. No one however is willing to allow that reality consists in a succession of sensations and thereby resembles a prolonged headache. Hence the main task of subsequent idealism has been, while upholding Berkeley's main thesis that reality is mental in the sense indicated, to evade its consequences. The usual plan is to draw a sharp distinction between perception and thought and to deny that when anything is said to be an idea or mental, there is implied any *antithesis* to its reality. It is said that when we call a stone or a chair an idea, we do not mean to deny its physical reality; we mean to indicate that it is also an object of thought, and that in the end it must be considered to exist only as object of thought. Similarly when we call triangularity or chairness an idea or notion or concept, we do not mean to deny that these natures are really manifested in particulars; we are only saying that their reality, like that of the particulars, presupposes a thinking subject. Thus, on this view, both particular and universal retain their ordinary reality *and* they are mental in the sense of existing only for a mind.

This view however conflicts with an absolute postulate of knowledge, *viz.* that what is known exists independently of the knowledge of it. This postulate appears to be the stumbling-block fatal to all idealism. Any attempt to vindicate this here would be out of place; and it will merely be assumed that this asserted postulate of knowledge is a postulate of it. In any case, the assumption is only necessary for criticism of part of Dr. Ward's position. Given this assumption, consideration is needed of the appropriateness of saying that the chair or triangularity are mental or are 'ideas'. When we call something mental, we imply that it would disappear with the disappearance of the mind to which it relates. Thus a smell or a toothache is naturally called mental, because it presupposes the existence of a mind which smells or has the pain. And it is characteristic of the smell and the toothache that they presuppose not a knowing but a feeling or sensitive subject. Is it however legitimate to call a chair mental? If it be meant that the chair presupposes a perceiving subject, the term mental is justified; but there is involved a lapse into subjective idealism

and the chair is resolved into a collection of sensations. Hence this meaning is usually rejected, and reasonably rejected by modern idealists; the proper meaning is said to be that the chair presupposes a knowing or thinking subject. But, on the given assumption, this view conflicts with the very nature of knowledge. If knowledge is essentially discovery, *i.e.* the finding of what already *is*, the chair is not mental on the ground that it only exists as an element in the knowledge of a mind. The same argument holds good of triangularity. Though its reality and that of the chair is of a different kind, it is just as little mental as the chair.

The way in which the Lockian and Berkeleyan standpoints enter into and affect psychology may now be considered.

The Berkeleyan standpoint is avowedly the basis of Dr. Ward's distinction between psychology and the physical sciences. 'The whole choir of heaven and furniture of earth,' as presented to an individual is a fact for psychology, while, if considered apart from such presentation, it belongs to physics. The implication, of course, is that the choir of heaven as presented is mental and that it is for this reason that it belongs to psychology. Now the distinction between the choir of heaven as presented and the choir of heaven cannot be the distinction between two things one of which is mental and the other of which is not; it is necessarily a distinction between two points of view from which one and same thing can be regarded. Nor can the distinction mean that a non-mental thing, the choir of heaven, becomes mental in being presented. For if something is said to be mental in a sense which will make it a fact for psychology, it is implied that its reality presupposes a mind, and that therefore without a mind it would not be real. Therefore it is implied that the choir of heaven, without the qualification 'as presented' is mental. This implication also follows directly from the express adoption of the Berkeleyan standpoint. It follows that if we press—as we ought to press—the Berkeleyan standpoint, expressed in Dr. Ward's statement that of all the facts with which he deals, the psychologist may truly say that their *esse* is *percipi*, the choir of heaven is implied to be a collection of sensations, or at least to have that dependence on the mind which a sensation has. But if the choir of heaven has this kind of reality it cannot possibly be the object of astronomy, in any sense in which we should recognise the subject. If the stars only have the kind of reality which belongs to sensation, astronomy disappears. It follows then from the adoption of the Berkeleyan standpoint that Dr.

Ward has not only failed to distinguish psychology from astronomy (for there is no astronomy from which to distinguish it) or more generally from physics, but has also abolished physics altogether.

It may perhaps be replied that Dr. Ward's real intention is to adopt the modern emendation of Berkeleyanism rather than Berkeleyanism itself. For his object is to distinguish psychology from physical science, and his contention about science is that it treats its subject matter in abstraction from its relation to a *knowing* subject. Hence, it will be said, for Dr. Ward the choir of heaven as presented means the choir as it is *known* to be, whether by perception or otherwise. And as object of knowledge or thought, the choir of heaven has not the transitoriness of a sensation, but is real in the sense in which physical science takes it to be real. But if that be Dr. Ward's view, it is open to the realist criticism that the choir of heaven has no claim to the term mental, and therefore in no way belongs to psychology. The choir of heaven considered simply as an object of knowledge is presupposed to exist whether it is known or not. And without any assumption of the realist standpoint, it can be shown that Dr. Ward has no right to the view, thus interpreted. For not only does he say that of all psychological facts the *esse* is *percipi*, but he invariably proceeds on this supposition in his actual treatment of the subject.

Further it can be shown independently of the preceding criticism that Dr. Ward's distinction between psychology and science breaks down. Suppose it to be conceded that the distinction between the choir of heaven and the choir of heaven as presented is a justifiable distinction of two points of view from which one and the same thing can be regarded. It cannot, however, possibly form the basis of a distinction between psychology and science. For to do this, the word presented must mean *known*. The distinction must be that psychology treats objects as *known* and science treats them in abstraction from the fact of their being *known*. But on any theory of knowledge, realistic or idealistic, this is no distinction at all. The choir as known is simply the choir; for the meaning of the term knowledge presupposes that what the reality known is and what it is known to be are the same. Otherwise the knowledge would not be knowledge. It is useless to point out that individuals make mistakes in knowledge and to substitute for the choir as known the choir as it is believed or opined to be. For science so far as it asserts at all implies that its assertions hold good. If to believe means to think probable, then as a

probability is thought to hold good so far as, though only so far as, it goes, there is no distinction between the thing and the thing as it is believed to be. If to believe means to feel sure, though to be or be possibly mistaken, then it is true that a distinction can be drawn between the choir and the choir as it is believed to be; but as the choir is apprehended through the belief and as the choir and the choir as believed will be thought to be the same, the distinction cannot be drawn in a way which will serve to distinguish psychology and science.

Of course the real distinction which is before Dr. Ward's mind is that between the choir of heaven and a given individual's act of apprehending or believing that it is so and so. The one fact belongs to physics and the other to psychology. But the distinction so stated will not yield Dr. Ward what he wants. An individual's act of apprehending is so far from being a presentation that it is rather the attending to something else which is presented, *viz.*, the reality. A presentation falls on the object side of the relation subject-object; an act of apprehending or attending falls on the subject side. But it is essential to Dr. Ward that the choir as presented should fall on the object side of the relation; otherwise he cannot hold that psychology and science deal with the same thing taken in different relations.

Psychology, in short, cannot be said to study the world as presented. The words 'as presented' cannot modify the word 'world,' and if 'the world as presented' means at bottom the world, Dr. Ward's view identifies psychology with physics.

It will be objected that this criticism affects only Dr. Ward's definition of psychology and not the details of the subject as described by Dr. Ward and others. The fallacy, however, infects the subject itself. Three examples out of many which might be given may suffice.

Dr. Ward devotes a paragraph to the 'intuition of things'. In this paragraph he speaks of the distinct elements which enter into the *complex presentation which we call a thing*[1] such as its colour or solidity. And he points out that psychology may be expected to give an account of the following elements in a complex presentation, such as that of an orange or a piece of wax—(*a*) its reality, (*b*) its solidity, (*c*) its permanence, (*d*) its unity and complexity, and (*e*) its substantiality. It would naturally be expected that this account had nothing to do with psychology and that its aim was to analyse the

[1] The italics are mine.

nature of a thing or substance. For *its* solidity, etc., ought to refer, not to our apprehension of an orange, which of course is not extended, but to the orange itself. Yet, even if Dr. Ward's express assertion of the psychological character of the inquiry be ignored, it will be found that his actual account of these elements is concerned solely with what is mental. For instance he points out that here real is not opposed as the material to the mental, but stands for the sense given or presented in distinction from the ideal or represented (*i.e.* imagined). In other words the orange is treated as if it were a presentation, *i.e.* as something purely mental. The reality of the orange is confused with the reality of our perception of it and the confusion passed unnoticed because there is supposed to be involved only the distinction between the thing and the thing as presented to us. And the same confusion is involved in Dr. Ward's assertion that the last three factors in the *psychological constitution of things*[1] might be described in general terms as the time relations of their components.

The second illustration of the fallacy may be taken from Dr. Stout's *Manual of Psychology*, p. 133.

"In psychology we have to attend to sensations as such; we have to examine their attributes as psychical states and not merely their meaning as vehicles of knowledge. The two points of view only partially coincide. If we compare the colour red as a quality of a material object with the colour red as a quality of the corresponding sensation, we find that redness as immediately perceived is an attribute common to both. The difference lies in the different relations into which it enters in the two cases. As a quality of the thing, it is considered in relation to other qualities of the thing, its shape, texture, etc. As a psychical state, it is considered as a peculiar modification of the consciousness of the percipient, in relation to the general flow of his mental life."

These sentences provoke the question: 'How is it possible for any one who is not misled by the supposed distinction between a thing and a thing as presented to us, to imagine that the same thing red can be at once a quality of a material object and a psychical state or even the quality of a psychical state?'

Again, Dr. Stout in his *Manual of Psychology* (p. 58) lays down that it is advisable not to use the terms 'presentation' and 'object' as synonymous, but to draw a distinction between them. And he says: "It will be convenient to apply the term

[1] The italics are mine.

'presentation' to the varying appearances assumed by[1] an object recognised as the same during the process of attending to it. . . . In attending to an object, though we are aware of the object as the same throughout, we apprehend it or endeavour to apprehend it in different aspects. I propose to mark the distinction between the identical object and its varying appearances by a distinction of terminology. I shall use the term 'object' for the whole which we are attending and endeavouring to bring before consciousness more fully and distinctly. I shall reserve the term presentation for the special characters or relations of the object as they appear successively in different phases of the cognitive process. For instance, when I see an apple and pick it up, the apple as seen and the apple as touched are for me different presentations of the same thing. For the baby on the contrary the apple as seen and the apple as felt are two distinct objects."

The passage is obscure: analysis of it however seems to show (1) that it is a statement of the illusory distinction between a non-psychical reality as presented and as not presented; (2) that the distinction is for Dr. Stout a real one because he thinks of a reality as presented as psychical; (3) that this is due to the identification of this distinction with another—which is also in the end untenable—that between a non-psychical reality and its 'appearances' which are psychical.

At first sight the distinction drawn seems to be that between a physical thing and its 'appearances'. ('The identical object and its varying appearances.') In conformity with this the 'apple as seen' would mean the appearance of the apple to sight, and 'the apple as seen' and 'the apple as touched' might fairly be called different presentations of the same thing. This interpretation, however, is incompatible with the definition of presentation as 'the special characters and relations of the object as they appear,' for the 'special characters' are qualities of the object and not appearances. Moreover it would limit our knowledge to knowledge of the appearances; we should know not the apple but only its appearances.

Dr. Stout's real view must be ascertained from his definition. A presentation is the special characters of the object as they appear, as opposed to the whole object which does not appear or appear fully. Here two distinctions are involved; that between the whole object and any part of it, *i.e.* any of its qualities, and that between something as not pre-

[1] I am unable to discover the meaning of 'assumed by'.

sented or not appearing and the same thing as presented or appearing. These distinctions have been conjoined, because it is held that, while the whole object is not at any rate fully before consciousness, certain parts of it are so. The first distinction, however, ought not to enter into the meaning of presentation, for the distinction between the whole and a part of the thing lies within the thing. It is pointless to call a part of a thing a presentation, in virtue of its being a part. The meaning of 'object' and 'presentation' must therefore be found in the second distinction. A presentation must be something as presented (whether the something be the whole or a part of the thing). Again, 'presented' must mean 'known'. For what is said to appear or to be presented is the special characters of the thing; as these characters are *ex-hypothesi* real characters, their 'appearing' must mean their being known. The distinction then between an object and a presentation is that between a reality and the same reality as known. Thus the assertion that the apple as seen and the apple as touched are presentations must mean that the qualities of the apple presented to sight and to touch are, *as presented*, presentations; the objects from which they are distinguished are the same qualities as not presented.

The difficulty of the distinction is twofold. In the first place it is unreal; since presented means known, the qualities of the apple as presented and as not presented are not distinguishable. In the second place it renders the phrase 'different presentations of the same thing' meaningless.[1] If a presentation is an object as presented, there is nothing *of* which it is a presentation. The apple as seen is not a presentation of the apple but the apple. Its qualities as presented are not a presentation of the qualities but the qualities. What we apprehend in the apple by sight and touch may be different *qualities* but not different *presentations* of the same thing.

To what then does the passage owe its plausibility? Surely to a covert identification of the above distinction with that between a physical thing and its 'appearances'. The distinction between a non-psychical reality regarded from two points of view is identified with the distinction between a non-psychical reality and a psychical 'appearance' or presentation of it. This is really implied in the terms used to express the original distinction, for an 'object' and a 'pre-

[1] On any view of presentation, I am unable to reconcile Dr. Stout's statements that the apple as seen and as touched are for me different presentations of the same thing, and that for the baby they are distinct objects.

sentation' naturally designate two realities and not the same reality differently regarded. The distinction between an individual as a man and as a ruler is naturally described not as that between a man and a ruler but as that between an individual *qua* man and *qua* ruler. In any case the identification is implied in the assertion that the apple as seen and as touched are for me different presentations of the same thing. Unless 'the qualities of the apple as seen' means the appearance of these qualities, it cannot be called a presentation *of* the thing. Moreover, Dr. Stout speaks of the distinction between an identical object and its varying appearances as if this were alternative statement of the distinction which he is drawing.

The net result appears to be this. Dr. Stout is describing certain facts of perception in terms of a distinction between an 'object' and a 'presentation'. If the distinction is a real one, he is committed to a view of perception which implies that we do not know the physical world but only its appearances. That this consequence is unnoticed is due to Dr. Stout's view that the distinction which he is stating is merely that between an object and an object as presented to us and that this distinction is real.

The manner in which the Lockian standpoint enters into and affects psychology may be approached through Dr. Ward's account of presentation. This appears to rest upon a covert or undetected inconsistency. Primarily Dr. Ward intends the word presentation to stand simply for the relation of object to subject. "We may say that ideas are objects and the relation of objects to subjects is presentation. And it is because only objects[1] sustain this relation that they may be spoken of simply as presentations." And this is the right usage, if, as Dr. Ward intends, the word presentation is to stand for knowledge in a general sense. If however this usage be retained, the word should convey no suggestion as to the nature of the object presented; to use Dr. Ward's phraseology, it should mean only that an object, *whatever it be*, is attended to by a subject. And this meaning is consistent with Dr. Ward's assertion that science abstracts from the presentation of its subject matter to a subject, while it is the aim of psychology to take this into account. Nevertheless the references to Locke and the actual use of the term presentation covertly introduce the Lockian theory that what is presented is 'idea' or something mental and not the reality

[1] The context implies that objects here means objects as opposed to subjects.

itself. And the reason is that the body of psychological doctrine mainly depends on the Lockian standpoint.

This introduction of the Lockian standpoint into the account of presentation can be shown in various ways.

"All that variety of mental facts which we speak of as sensations, perceptions, images, intuitions, concepts, notions have two characteristics in common: (1) they admit more or less of being attended to and (2) can be reproduced and associated together. It is here proposed to use the term presentation to connote such a mental fact, and as the best equivalent for what Locke meant by idea." Here 'to be attended to' is really equivalent to 'to be presented'; and it is implied that the only facts which can be attended to are mental facts or ideas in Locke's sense, and also that the sensations, perceptions, etc., enumerated form an exhaustive list of these ideas.

Again, Dr. Ward (and Dr. Stout does the same) frequently speaks of *a* presentation *of something*, *e.g.*, of the complex presentation of a rose. This language implies that the thing and its presentation are distinguished and that what is attended to or presented is not the thing but a special kind of mental reality called a presentation.

Dr. Ward also says that 'as presented to a subject, a presentation might with advantage be called an object or perhaps a *psychical* object, to distinguish it from what are called objects apart from presentation'. In this way a distinction between the same reality taken in two different relations, *i.e.*, as presented and as not presented, is erected into a distinction between two kinds of realities, the one psychical and the other not psychical.

The real vindication, however, must be found not in Dr. Ward's statements about presentation but in his use of the term in describing the results of 'psychology'. It will be found that the description always presupposes that what is before the mind or presented is not reality but something mental; it is either a sensation or a percept (as the psychologist prefers to call a perception, and rightly from his standpoint) or a mental image or a notion or concept; and the generic term for these is presentation. These are the elements said to be associated or reproduced or to 'interact with one another'

Dr. Stout also appears explicitly to accept the Lockian view that reality is not the direct object of the mind. He says[1] "We may, I think, confidently affirm that the object

[1] *Analytic Psychology*, i., p. 45.

of thought is never a content of our finite consciousness". This seems to mean that the object of thought is not directly apprehended, and the reason appears to lie in the inconclusive argument that if we supposed the apprehension to be direct, we should be obliged to identify the object with the modification of consciousness whereby we think it, and therefore to accept the impossible conclusion that the object does not exist independently of this consciousness.

Further when we go on to look for Dr. Stout's positive view of the relation of thought to its object, we find that it is stated in terms of the familar phrase 'objective reference'. It is difficult to discover Dr. Stout's meaning. But the following sentences may be taken as data.

"In the process by which we take cognisance of an object two constituents are discernible: (1) A thought reference to something, which as the thinker means or intends it, is not a present modification of his individual consciousness; (2) A more or less specific modification of his individual consciousness which defines and determines the direction of thought to this or that special object; this special mode of subjective experience we may call a *presentation*. We may say if we like that the object itself is presented, but we must not say that it is a presentation; and when we say that it is presented, it is better to say that it is presented to consciousness, than that it is presented in consciousness. In the perception of a tree the reference to an object is circumscribed and directed by a plexus of visual and other presentations. The object of thought is thereby made determinate. It is a material thing, not a mental occurrence, a tree and not a stone."

These sentences raise the obvious questions, "What does 'referring' or 'reference to an object' mean?" and "What is referred?" But they at least seem to decide that *what* does the referring is thought. (*Cf. Analytic Psychology*, i., p. 44. We are able to "look after and before, and sigh for what is not," only because thought can refer to an object which is not present in consciousness.)

The next page, however, of the *Analytic Psychology* throws doubt on this. "Thought is discriminative only so far as it has presentation for its vehicle. Ought we not to recognise a fundamental distinction between discriminative thinking and the manifold contents of consciousness which make such discrimination possible? The answer to this question depends on the possibility or impossibility of some kind of severance between the mere existence of presentations as

immediate experiences on the one hand and *their*[1] objective reference on the other. It is easy to show that there is by no means a complete coincidence between the existence of presentations and their significance for thought. . . . At this moment I am thinking about psychological topics. I receive at the same time a multitude of diversified impressions from surrounding things which certainly enter into my total experience. But if I refer them to an object at all, I do so in a very indeterminate way. To quote Abraham Tucker: 'We may see leaves falling from trees, birds flying in the air or cattle grazing upon the ground, without affirming or denying or thinking anything concerning them: and yet perhaps upon being asked a minute afterwards we could remember what we had seen'."

Cf. Analytic Psychology, i., p. 100. "We attend in so far as our psychical activity directly produces or maintains and develops, such contents of consciousness as have a more or less determinate objective reference. The object referred to may be of any kind whatever, *e.g.* a material thing, the quality of a present sensation, a bygone emotion, a system of philosophy or nature of the soul. If and so far as any content of consciousness is a perception, idea, conception, apprehension or awareness[2] of somewhat, the activity in and through which this content exists is attentive activity. This account of the matter is in obvious agreement with the common-sense view according to which attention is the self-direction of the mind to the object."

This account appears to be a compound of two different views—one of which however is dominant.

The view which is not dominant is simply Mr. Bradley's theory of judgment. In judgment *we refer* an ideal content recognised as such to a reality beyond the act. Here to refer means simply to judge or predicate: *what* refers is thought or the thinking subject; and what is referred is an idea or presentation. Dr. Stout's distinction between red as a quality of a material object and red as a quality of the corresponding sensation is perhaps based on this view.

On the view which Dr. Stout normally adopts, that which refers to an object is not we but a presentation; and 'refer' is in meaning not active as it is on the former view but intransitive; it means to be *a sign of*. (*Cf.* the 'objective reference *of presentations*,' and '*their* significance for thought'.) The process by which we take cognisance of an object is this.

[1] The italics are mine.

[2] I fail to see how this can be described as a content of consciousness.

We apprehend immediately a presentation—which is a specific modification of our individual consciousness—and this presentation being a sign of an object with qualities to correspond, we infer from the presentation that there is an object with corresponding qualities.

If, as seems to be the case, this is Dr. Stout's real view, then his account is a repetition of the Lockian standpoint, stated rather vaguely. And the words 'reference' and 'significance,' etc., only conceal and do not remove the difficulties.

Two further points should be noticed. If Dr. Stout's view has been fairly represented, it can easily be driven into subjective idealism. For it is easy to show that the inference from the presentation to the object is impossible. As Dr. Stout himself says[1] sensations *as such* are psychical states. The same thing must be true of presentations. If these as such are psychical the inference to a non-psychical object is absolutely baseless.

Again, whether the above account is correct or not, Dr. Stout does not succeed in keeping to the view that the immediate object of the mind is a presentation and not an object. Though his general statements conform to this, his statement of instances does not. The pressure of the real facts is too strong for him. "I am thinking about psychological topics. I receive at the same time a multitude of diversified impressions from surrounding things. . . . But if I refer them to an object at all I do so in a very indeterminate way. To quote Abraham Tucker, 'We may see *leaves falling from trees, birds flying in the air*,' etc. . . ."[2] Again, Dr. Stout lays stress on the importance of the doctrine of 'psychic fringes'. Yet even the statement of the meaning of a psychic fringe seems to involve a contradiction. "We have now to turn to the instances in which only a certain part or certain parts of the whole are distinctly apprehended while the rest appear as a distinctionless unity." Here it is implied that the 'fringe' is that part of the real whole which is indistinctly apprehended. But if so, what possible justification is there for calling this fringe 'psychic'? If it be psychic, it is on his view necessarily not part of the object but of its presentation. It is however the instances that should primarily be considered. "Complex sensible objects do not appear to the object in all their sensible detail. When I look *at a house*, what is actually seen together with what is mentally pictured constitute only a small part of the object as it is perceived. . . .

[1] *Manual*, p. 134. [2] The italics are mine.

At the most only the last two or three notes of a melody are perceived at its close, and yet the musically gifted are aware of it as a whole. Similarly I may be keenly aware of the unity of a sonnet in respect of metrical form while I am reading the last lines, although the words of the preceding lines are no longer present to my mind."

All these instances imply that the real object and not a presentation of it is the direct object of the mind—and that the real object—though indistinctly perceived has no possible title to the term *psychic* fringe.[1]

[1] I have learned from Dr. Stout privately that he would not now subscribe to the view expressed in the *Analytic Psychology* exactly in the form in which it is there stated, and that in any case I have misrepresented him. And he has been good enough to allow me to quote some sentences from a letter. "I have come to see that not even in Bradley's sense is there any 'ideal content' intervening between the knowing mind and what it knows. In this respect all knowing is absolutely immediate. When I speak of mediate knowledge, it is quite another kind of mediacy I mean. It is more like the Aristotelian than the Cartesian mediacy. It is the kind of mediacy involved explicitly in all inference. B is known mediately, inasmuch as it is only known as being implied in A. A necessitates B, so that we cannot apprehend A without also apprehending B as another side of the same total object. Thus our knowledge of the other side of the moon is mediate, inasmuch as it depends on our comparatively immediate knowledge of the side which is turned towards us. Now it is certainly a metaphysical or logical doctrine of mine that what we can apprehend with pure immediacy is only to be found in our psychical being, in sensations, feelings, etc. But our psychical existence in its various modes is not contrasted with 'reality' as something ideal and unreal. Rather it is that portion of real existence through which I have cognisance of other real existence. But I *do* know the other real existence and not merely ideas of it. It is, I say, my view that we have completely direct acquaintance only with what forms part of our own psychical being. But this view is in no way especially psychological. There are psychologists who do not share it, and if I gave it up tomorrow, it would not make any serious difference to my psychology."

I confess that I do not see how this account differs in principle from that given above or how it meets the above criticisms. In particular, as I think, it can equally be driven into subjective idealism. The two sides of the moon are, no doubt, two sides of the same total fact. But a part of our own psychical being and anything not psychical, *e.g.* the moon, are not. And if we only have completely direct acquaintance with what is part of our psychical being, I do not see how the inference from it to the moon (and the transition must surely be by way of inference) can be justified. Moreover it is difficult to see what 'completely' adds to 'direct'; for that which is incompletely direct ought to mean not that which is apprehended by a blend of directness and indirectness—which would be meaningless—but that which is as to part of itself directly apprehended and as to part indirectly apprehended; and in that case it would be conceded that we have direct apprehension of part of what was not psychical. Surely, too, the abandonment of the doctrine that only what is psychical is completely direct object of apprehension would, or at least ought to, seriously alter Dr. Stout's psychology.

Again, that the attitude of psychologists generally to knowledge is that which has been attributed to Dr. Stout can best be seen by considering the problem which is always at the back of their minds. The problem arises from what may be called the common sense but vicious theory of perception. According to this theory, the physical world has such independence of the mind that not only does it exist independently of the mind but it is never the direct object of perception or thought. The only relation between objects and the mind consists in the fact that, somehow by their interaction with the physical organs and the brain, they originate sensations. The sensations are in the first instance the sole direct object of the mind. This theory gives rise to the following problem for the 'psychologist'. We are *now* aware of much more than sensation. We have come to apprehend a spatial and temporal world in its manifold detail. As the world is apprehended not directly but only by the intervention of ideas, our present condition of knowledge has to be stated by saying that what we now have before us is not the world but a 'presentation' or 'representation' of it. Hence explanation has to be given as to how it is that primitive sensation has come to be transformed into this 'presentation of a world'. The presentation is *ex-hypothesi* mental; it is, in Dr. Stout's language, a modification of consciousness. And the process of explanation consists in showing how the primitive mental elements which are at bottom sensations and (if they are held to be ultimate) mental images become elaborated into a presentation of the world, which consists of percepts and ideas. This may be illustrated, to take one instance out of many, by the explanation which is given of recognition, *i.e.* the activity by which we recognise an object as one of a kind, as when we recognise that this colour is red. Dr. Ward, in introducing the subject of perception, speaks of the synthesis of the proximately elementary presentations into *those complex presentations which are called perceptions, intuitions, etc.*[1] Then referring to the special usage of the term perception in the sense of recognition, he says that a sensation which had been attended to a few times might be perceived as familiar. "Such percept" (*i.e.* the familiar sensation) "being a 'presentative-representative complex' and wholly sensory, we might symbolise it, details apart, as S and *s*, using S for the present sensation and *s* for a former sensation represented." It is here implied that a 'perception' is dis-

[1] The italics are mine.

tinguished from a sensation as being a sensation which is in some way complicated. The explanation consists in showing that the perception to be explained is only the simple and primitive sensation in a complex form. And it appears to be the general aim of psychology to explain all the higher processes of knowledge in this manner.

Now if the preceding account fairly represents the position of Dr. Ward and other psychologists, it seems necessary to urge that it is in principle vitiated by its adoption of the Lockian standpoint and that this forms the πρῶτον ψεῦδος of their treatment of the subject. In knowledge from beginning to end we are never confronted by mere 'ideas' in the sense of modifications of the mind. When we perceive, we perceive or attend to objects, and not percepts of objects. Apparent exceptions, *e.g.* illusions, can in the end be explained away.[1] When we conceive, what we are aware of or attend to, is not any general 'idea' but a real universal. If this be true, the account given by 'psychology' of the processes of knowledge is throughout vitiated by the non-existence of the counters or units in terms of which it speaks. Assertions, for instance, about the association and reproduction of 'ideas' cannot be the correct account of the facts if there are no ideas to be associated or reproduced. And where the Berkeleyan standpoint is momentarily adopted, the position is no better, because the object of the mind is still taken to be an idea or a modification of consciousness.

With this fallacy there is connected another. It has often been pointed out that, as an object of study or knowledge, knowledge itself, though real, is from the nature of the case not in the same position as any other reality. Knowledge is the knowledge or apprehension of what is. It presupposes therefore a reality which simply is and is not itself knowledge, as that which is to be known. This of course does not mean that knowledge presupposes a reality which is without being anything in particular; the meaning is rather that it presupposes a reality which may have any particular kind of being (as *e.g.*, that of a sensation or of a tree) except the kind of being which consists in knowing. All reality

[1] It is significant to note how much 'psychology' concerns itself with illusions, *i.e.* mistakes in detail, while the problem of the possibility of a mistake in principle is ignored. Illusions, it is true, at first sight lend countenance to the view that at least in their case, we are not directly confronted by reality but have before us an 'idea' or 'presentation' or appearance. This view however appears to rest on a mistaken analysis of the distinction between 'appearance' and 'reality'. *Cf.* MIND, No. 58, Discussion on 'Appearances and Reality'.

except knowledge itself is, in relation to knowledge, something which is just not knowledge but something to be known. In other words, knowledge implies a subject-object relation; knowing as the apprehending of what is falls on the subject side of the relation, and everything else that is real falls, as the reality to be apprehended, on the object side. Further, the term object, as applied to anything real, only has meaning in relation to knowledge.[1] An object is an object of a knowing subject. And to call anything an object is to indicate that it is an existent which is or may be known; and what is object falls on the object side of the relation subject-object. It follows that knowledge itself or, to avoid ambiguity, knowing can never be in the proper sense of the word an object. A knower is properly the subject of an object, and knowing is the relation in which a knower stands to something known. Even though reflexion enables us to become aware of our knowing, the knowing is not an object in the sense in which any reality which is not an act of knowing or a knowing subject is an object.[2] The issue is not a mere question of the proper use of the term object, for the subject matter of any science is an 'object' in the sense indicated; it is a reality to be known and not itself knowledge.

[1] This may seem contradicted by the fact that we speak of an object of desire and mean thereby something not known but desired. Such 'object' however is not real or fact; otherwise it would not be desired. Psychologists appear not always to bear in mind the essential distinction between object of desire and object of knowledge (*cf.* Dr. Stout, *Groundwork of Psychology*, p. 49). 'In the "pursuit of a prey by a man or a beast," the total object of attention is not the mere animal pursued, but the "whole pursuit of the animal. And hence every detail in the scene which in any way bears on this pursuit, whether as contributing to it or as hindering it, is or may be included within the object attended to. Or, let us take the instance where a woman's object in going to a party is in fact to promote the success of her daughter. We might say here naturally that her daughter was throughout the real object of her attention. But this way of speaking, if convenient, is not correct. Her true 'real object' is the observing, the doing, and the preventing this and that thing in regard to her daughter—in a certain interest"' (quoted from Mr. Bradley). Surely here object of attention as applied to the 'animal pursued' and to the daughter means object of knowledge; while as applied to the 'whole pursuit of the animal' and 'the success of her daughter' it means object of desire. Yet the use of the word attention implies that our attitude to these 'objects' is the same in both classes of case and that the objects are realities; we can only 'attend' to what is real or fact.

[2] The objection that this view seems to exclude the possibility of self-consciousness, in the sense of consciousness of ourselves as knowing, does not affect the face of the argument against the psychologists. And upon no view can knowledge itself be an object in the same sense in which anything else can be an object.

Consequently it is only another way of stating the conclusion to say that knowledge or knowing can never be the subject-matter of a 'science,' in the sense in which we opposed 'science' to 'philosophy'.

Psychologists, it seems, fail to notice this or at any rate to appreciate its importance. For, proceeding as they do as if their subject were a science, they in reality treat knowing as if it were a special kind of object, instead of as being just that which is opposed to an object as the apprehension of it. In other words they state the subject side of the relation subject-object in terms of the object side, and treat the apprehension of an object as if it were itself an object. The consequence is that they fail to describe knowledge altogether.

It is easy to vindicate the justice of this criticism. For in the end psychologists making knowing to consist in the having presentations of reality, *i.e.* percepts, images or notions, or a combination of them. The 'presentation' of something *is* the knowledge of it. It is not noticed that the 'presentation,' so far from being knowledge of reality, is merely a new reality or object—which itself requires to be known.[1] The 'presentation' of a house is as much an object, as opposed to the knowledge of an object, as the house itself. The fact that it is 'mental' in no way makes it knowledge of anything. A pain or a smell is mental, but it is not the apprehension of anything; it itself has to be apprehended or known; and the 'presentation' of the house is in the same position. The psychologists, in short, appear to make the apprehension of one reality (*e.g.* the house) consist in the existence of another (its presentation).

To prove this, it is sufficient to point to the persistence or even to the existence of the terms 'percept' and 'concept' in works on psychology. But three illustrations of the procedure may be given.

For the first we may turn to Dr. Ward's account of 'recognition'. When we recognise something we are said to have before us a wholly sensory presentative-representative complex, which is called a percept. The having this *is* the recognition. Yet the so-called complex, so far from being the recognition of anything, is really a new object which as much needs to be 'recognised' as the original object. Thus while recognition, *i.e.* the act of seeing something, as an instance of a universal, really falls on the subject side of the relation subject-object, Dr. Ward places it on the object side.

[1] I owe the point to Prof. Cook Wilson, though he is not responsible for its application to the 'psychologists'.

Again, all psychologists attach importance to an account of the development of space perception. Yet how do they describe it? Dr. Stout[1] speaks of extensity becoming extension; and this statement may be taken as typical. The real fact to be explained is as to how our apprehension of extensity (if extensity means anything) is transformed into the apprehension of extension. Yet Dr. Stout's statements refer to one mental object 'extensity' growing into another mental object 'extension';[2] and even if these objects can be regarded as mental, and do not imply a confusion already indicated, the transition in our apprehension is as little explained as ever. The account has *no* plausibility unless extensity is identified with the apprehension of extensity, and extension with the apprehension of extension; and in that case knowledge of the objects, real extensity and real space is stated in terms of two other objects, mental extensity and mental extension.

Thirdly, according to Dr. Ward, all stages of knowledge are simply presentations attended to. The consequence is that he treats these differences from one another, *e.g.* the difference between perceiving and conceiving, as differences in the character of the presentations and not as differences on the attention or subject side of the relation subject-object. Surely this is the exact reverse of the truth. Even though perceiving and conceiving involve differences on the object side of the relation (for the one is the apprehension of the particular, and the other is the apprehension of the universal), yet the differences between them fall on the subject side. The act of perceiving is one thing and the act of conceiving is another. Thus a difference in knowing is treated as consisting in a difference in objects.

The connexion between this fallacy of treating knowledge as if it were a special kind of object—*viz.* a mental object,

[1] *Manual of Psychology*, pp. 351, 352; *cf.* bk. iii., ch. ii., iii., § 4, *passim*. Extensity, in order to become extension, must assume more or less definite order of parts. How is this acquired? . . . In order to account for spatial order, we must have recourse to some factor distinct altogether from extensity. This factor must show definite serial arrangement in the way of position and distance. It must also be so intimately connected with experiences of extensity that the definite arrangements which belong to it may belong to them. . . . Position and distance must come to belong to the extensity itself.

[2] It is true that Dr. Stout sometimes speaks of experiences of extensity rather than of extensity, and of perception of spatial order rather than of spatial order; but his account presupposes that the experience and what is experienced, the perception and what is perceived, are identical (*cf.* the words 'it' and 'them' in the last line but one of the extract quoted in the preceding note).

and the view that the object of the mind is its own ideas can be shown thus. The psychologist rightly starts from the position that knowledge is mental, in the sense that its existence involves the existence of a mind. This characteristic knowledge shares with feeling and sensation, though with the difference—which is really vital—that knowing implies a knowing subject, while feeling and sensation imply a sensitive subject. This conviction being combined with a standpoint which commits the psychologist to thinking of knowledge in terms of an object, he necessarily treats all knowing as consisting in the having a mental object. It at once follows that the only object of the mind is its own states or modifications. And as the only mental states which can with any plausibility be treated as objects are sensations and feelings and any other elements which are on a level with these *e.g.* so-called 'appearances,' the object of the mind comes to be identified with these.

In conclusion criticism may be directed to that part of the psychologists' aim which may be expressed as the demand to *explain* mental processes. The attempt to derive the higher and later processes of mind from the lower or more primitive is a general one and appears at every turn. It can be illustrated without breaking new ground by the endeavour to explain the act of 'recognition' and our perception of space and spatial objects. These are to be shown to be the result or outcome of more primitive mental operations. This aim however seems from the nature of the case to be impossible. The various terms of mental process are as ultimate and *sui generis* as space, time or colour. As such they are incapable of being derived from or stated in terms of anything else. The perception of space for instance is as ultimate as space itself. The act of recognising an object as one of a kind is the immediate manifestation of a capacity of thought, which reflexion can recognise but can in no way explain. The same consideration holds good of the mind's power of apprehending universals. By reflecting on the common characteristics exhibited in particular triangles we become aware of triangularity. Philosophic reflexion can make us aware of this power of the mind, which forms part of its nature as an intelligence, but it cannot explain it.

The demand for explanation of mental processes appears to arise from the mistaken view that in all cases the ideal of knowledge is to explain. To this the answer is that the ideal of knowledge is to understand rather than to explain, and that much is perfectly intelligible which is not explicable. To take a very simple instance the operation of counting is

intelligible but it cannot be stated in terms of anything else; we can recognise it and see its intelligibility but we cannot explain it.[1] The outcome of this criticism is to reinstate the old faculty psychology which Dr. Ward describes as verbiage and mythology. It may be allowed that the attitude of faculty psychology has been abused, though not by the Greeks. But the recognition of fundamental mental capacities has its importance. It forms the way in which, when men begin to reflect, they express the discovery of the affinity of certain manifestations or realisations of the mind with certain others and of their distinctness from certain others, to which they are at the same time related. Similar manifestations are rightly said to be the expression of a common mental nature or capacity. Recognition of the fundamental capacities and of their mutual distinctness and relatedness is practically knowledge of what a mind is. To expect explanation here is simply a mistake. It is no more possible to derive knowledge from lower activities or higher activities of knowledge from its lower forms than it is possible to derive a mind from something which is not a mind. Does not current psychology make this mistake at the very beginning when it supposes that it is a branch not of philosophy but of science? Was not the Greek attitude fundamentally right, and is not in consequence the best psychology to be found only in Plato and Aristotle?

[1] I owe both the principle and the instance to Prof. Cook Wilson.

III.—THE STRUCTURE OF REALITY.

By Gerald Cator.

I desire that this paper may be regarded rather as an essay in Metaphysics than as an effort in Religious Apologetics. It is my purpose to recommend Theism solely on its merits as the metaphysical solution of the metaphysical problem as to the structure of Reality.

The postulates from which I set out are two: (1) Reality is intelligible. (2) Whatever appears to be is. I shall endeavour to prove each of these postulates and to show that while the first implies the spiritual nature of the Absolute the second secures the reality of the finite.

(1) That true knowledge is possible or that Reality is such that it can be truly represented in a mind is a position the denial of which involves the denier in self-contradiction. He does not merely stultify himself but in addition disproves his own assertion, since it implies the jurisdiction of logic. Now a statement is not true unless it says what it means, and this it does not do if it only holds under conditions of which it makes no mention—leaving us, so far as dependent on it for information, to suppose it unconditionally true.

Further, as Mr. Bradley says,[1] "thought demands to go *proprio motu*, or what is the same thing with a ground and reason. Now to pass from A to B if the ground remains external is for thought to pass with no ground at all." Putting together these two requirements, we may say that true knowledge must be complete in itself and must contain its own ground.

Now truth imports relation to a mind, and this relation is therefore essential to truth and is implied in asserting it. If therefore the mind for which knowledge is true is external to this knowledge, the ground of assertion is external, that is, as Mr. Bradley says, "for thought no ground at all". From these considerations it follows that Reality is not intelligible until it is represented as the content of the

[1] *App.*, 2nd ed., p. 562, note A.

thought of a mind containing within itself the whole ground of its own being and of all possible predicates.

Should the reader feel tempted to suspect this reasoning considered as a proof of the existence of an Absolute spirit in our world—'that with which we come into contact in perceptive experience'—I would remind him that it does not hold merely of judgments considered formally, but that if he ventures on any statement whatever about our world, he will be driven, by the sole necessity of making it true, to represent the character which it aims at ascribing to our world in its place in the consciousness of the Absolute spirit.

It is surely a little odd to be haunted by a suspicion that success in expressing what our world is may lead us to regard it as otherwise than as it is.

For detailed proof that the demand of thought is what I have stated, that it is a demand intrinsically capable of satisfaction, and that what goes on in knowledge is its satisfaction, I must refer the reader to the sources whence I have learnt, to *Appearance and Reality* and specially to Dr. Bosanquet's *Logic*.

There is one point to which I should call attention here—Mr. Bradley denies that the Absolute knows itself. This denial I attribute to a defect in his construction of the Absolute, that is to say, he constructs it not by any logical process starting at appearances, but by subsuming the content of appearances under an axiom of non-contradiction. Now Mr. Bradley himself has repeatedly pointed out that by subsuming we never really make the matter treated intelligible, because the principle of explanation—the axiom—remains external to the content to be explained. The Absolute so obtained is not a determinate logical function of appearances but is a bare unknowable. Appearances cannot be said to be harmonised in it in any other sense than that in which parallel lines may be said to meet at infinity, the meaning in each case being, as regards the lines that they never meet within the conditions which constitute their parallelism, as regards the appearances that they are never harmonised within the conditions which are essential to their being as appearances.

The meeting point of the parallel lines falls outside space, *i.e.* at infinity, and therefore outside the condition—the spatial system within which alone parallelism has either meaning or consequences.

Dr. Bosanquet[1] shows—to me it is almost the most

[1] *Logic*, vol. i., pp. 175-179.

interesting part of his argument—that an infinite series is never quite infinite: it can only be a series on condition of displaying some tendency to form a closed system.

Reality as a whole can only be intelligible by displaying the same tendency.

Now, according to Mr. Bradley, the negative relation which is of the essence of system does not hold within Reality between the Absolute and appearances. Therefore his Reality is not a system; therefore it is not intelligible; therefore neither of its correlative functions—appearance and the Absolute—is intelligible. Therefore the Absolute cannot know itself.

The *Principles of Logic* (pp. 449-450) contains a presentation of the Absolute resting on that conception of Reality as a logical system, which is so inconspicuous in *Appearance and Reality.*

The very title of this latter work discloses its fundamental error. Appearances cannot be opposed to, for they are part of Reality. Their true logical opposite is not Reality but the Absolute, and to it they are opposed as the finite to the Infinite, the relation being, if viewed from the side of appearances, one of total dependence; if viewed from the side of the Absolute, one of absoluteness, independence or irrelativity.

(2) *Whatever appears to be is.*—By saying that a content is real, we mean in the first instance, that it is a logical function of the real system with which we come in contact in perceptive experience. Now this real system (the real world of common-sense) is itself an intellectual construction, and it owes its reality to its being a logical function of the absolute and all-inclusive system. If these positions are granted, it will follow that every appearance is real if every appearance in its integral and proper nature is a function of the absolute system.

Since it is in the content of error and illusion, if anywhere, that we must look for unreal appearance, I propose to undertake an analysis which I hope will serve the double object of at once justifying this test of reality and of showing that every appearance satisfies it.

Consider such cases as the following: the variations of colour which an object presents in different lights and at different distances; the blueness, for example, of the hills on the horizon, which we refuse to refer to them as their *real* colour, or the ghostlike appearance of a scarecrow at night to a belated wanderer, or the likeness—unrecognisable by themselves—which strangers sometimes see between members

of a family; or the various ways in which one piece of scenery or some situation recalls (because it seems like) another; or again, let us consider the crookedness of the stick seen half in water, half in air, the sourness of the honey to a fevered tongue, the universal yellowness to a jaundiced vision, the colourlessness of objects to the colour blind, etc., etc.

We will begin with cases of colour. Is it not fairly clear that what we pitch on as the real colour of an object is that one of all the colours it presents under different circumstances and to different eyes which can most easily be systematised, having regard to the relations of its other sense presentations to its colour, to the intellectual economies of our mind and to the needs of human intercourse? The real colour is in fact the one presented in standard circumstances to standard eyes, in a standard light—it is, as it were, the reference colour of the object. It is neither more nor less real than the other colours, because they are all, like it, functions of the laws of the reflexion of light and related to one another in such a systematic way that the presentation of one colour aspect at one distance implies the presentation of another colour at another distance. In saying of the hillside "that is green," we assert implicitly the whole of the laws of light in virtue of which it is blue at another distance. This is very well illustrated by a case, which Prof. Clifford quotes, of Sir W. Rowan Hamilton predicting that a dot looked at through a certain kind of crystal at a certain angle would appear as a continuous circle. In such a case as this we speak of the visual object as "really" a dot, but the accurate statement is, that it is such as to appear a dot looked at through air and a circle looked at through Iceland spar. Neither of these aspects is more real than the other, but the one is more often encountered.

Take now a case of sheer illusion—the seeing of a ghost. Coming home late one evening I have to cross the churchyard; the moon peeps from behind a cloud and I see an oblong object—a human figure—it moves—I see through it. "That is a ghost," I say, with a thrill of conviction. What I am concerned to urge is, that the object in itself really possesses this evanescent ghost aspect, just as it possesses its other qualities. The distinction between the qualities an object really has and those it seems to have to such and such a percipient is futile, because an object has all its qualities in definite relation to some percipient, and under some definite circumstances, so that the idiosyncrasy of the percipient and the peculiarity of the circumstances are not distinguishing conditions. We often find some quality of

an object as it were trembling on the borders of reality. For example, the colours, by artificial light, of silks and wall papers enter into a logical construction (by the female mind), and are therefore allowed to be real, although as a rule we index a colour by means of its daylight value and admit only this to be the real colour.

Often, again, some aspect of an object which we set down as unreal and as not really qualifying it, turns out to have consequences and causal connexions and so enters into a logical scheme and becomes real. In ordinary life we have to conceive of an object as it were on a small scale, so that the less important aspects are invisible and are considered subjective only or illusion; then when attention is directed to the object with a view to understanding it, the conception as it were expands, the minor aspects take their place in the system as significant of its nature and then are recognised as real.

We find that a tendency to regard sensible colour as subjective and unreal asserts itself directly we find it more convenient to systematise our knowledge of colour in terms of the molecular motions which are its cause, and when from molecules we get back to electrons the molecules themselves are on the way to become displaced and relegated to the position of products of our subjectivity.

What we commonly call the real world is a congeries of index aspects of that part of Reality with which we come into immediate contact. It implies—because it is relative to—the less obtrusive aspects which therefore are also real. Finally all is real which is involved in the satisfaction of logical implication, and the ultimate real is that system which is logically complete and free from further implication or relativity to any beyond.

I would have the reader note that I am not taking up the position of such writers as Prof. K. Pearson, who says that the value of a conception consists simply in its conformity to our intellectual economies. I do not say for example that Heliocentricism is no truer than Geocentricism, but is only a simpler hypothesis.

Anybody who having accumulated a sufficient store of observations set out to theorise the motions of the Heavenly Bodies would find (because of the relativity of motion) that nothing within the phenomena to be formulated compelled his taking any one point as at rest, therefore (because of the intellectual necessity which I have already insisted on of making the ground of any truly satisfactory explanation internal to the content to be explained) it would be necessary

for a satisfactory understanding of the Heavenly motions to refer them, not to one arbitrarily chosen origin, but to the law in virtue of which reference to such and such a one out of a range of possible origins imposes on the series of motions such and such a formulation out of a series of possible formulations, *i.e.* to generalise the relations between origins and motions—in such a generalisation Heliocentricism and Geocentricism would occur as two cases, each confirmatory of the other (just as a stick is crooked seen half in water *because* it is straight seen all in air, or as the dot is a dot looked at through air *because* it is a circle looked at through Iceland spar). But Heliocentricism would be found to be nearer than Geocentricism to the wider generalisation which is their common centre and so would be truer.

We must now leave our postulates to receive what further elucidation they need from the use that we shall make of them.

Since, according to our conception, Reality is primarily a logical system, and since in describing its contents we must follow some plan, it will be best to take advantage of this fact and to follow the logical order, beginning at the logical beginning, *i.e.* pure datum.

An example of this is found in sense presentations, as is proved by experience, since growing independence of figure, working models, phantasms, particular illustrations, is the measure of the progress of the mind in knowledge, and is besides the distinguishing characteristic of the operations of superior and powerful minds as opposed to ordinary ones.

I will now give an example of this process of growing independence of data, and will then as it were comment on the significance of the details in the light of our postulates.

Let us suppose a man in possession of all his faculties, but utterly ignorant of machinery, to enter for the first time a large workshop. He would be conscious of a bewildering variety of sights, smells and sounds, cranks, wheels, shafts, revolving and reciprocating motions, clanging hammers, belts—figures moving to and fro, and he would know only that he was in the presence of moving things, metal things, etc. The concepts he would indeed have acquired before entering the shop, but since he would have gained them from objects similar to those before him, there is no error of principle involved in supposing him to

gain them from these very objects. At this first stage of knowledge, the differences (the details) merely, as it were, lie loosely on the surface of the universal (thing) like stones on ice, the universal is known and appropriated by the mind, the differences are experienced. As, however, the man's knowledge advanced, he would get to understand that the whole complex before him was dictated by, and could therefore be deduced from, considerations as to human needs, the material to be working human capacities as applied to the management of tools, etc. Then he would seek to understand more thoroughly by means of more universal representations becoming more and more independent of the particular Phantasm before him. He would approach to a self-sufficing universal representation, giving in pure unity a knowledge of the whole complex in all its details.

Since, then, knowledge as it becomes more perfect becomes less dependent on datum, and since this is not merely by concomitance but is the very measure of its approach to perfection, it follows that on reaching absolute perfection it would be independent of datum altogether, and would have its object within itself.

Let us now try to interpret this process in the light of our postulates.

First, as to the nature in which the ideal of knowledge would be completely satisfied. It would be an intuition complete in itself and therefore not based on datum, since, as we have seen, the necessity of datum is due to the incompleteness of knowledge. In it would be known at once all things in the light of all, and yet each in all its detail and individuality. Because it would include in itself the knowledge of all possible changes and their results, it would be pure act and for the same reason eternal. Also as depending on and referring to nothing beyond itself, it would be absolute. Further, it would be the self-conscious Absolute and not merely the absolute idea, since an idea is a separated portion of ideal content and, so far, is much the same as a possibility, which the Absolute cannot be.

Second.—The Absolute must be free from Phantasm, *e.g.* all sensile experience, because of the completeness of its knowledge, and yet because Phantasm *quâ* datum is a logical function of the absolute system, Phantasm is real.

In the ordinary experience of life, a relatively complete consciousness encounters a quite strange object now and then (as in our machinery example), but, taking the logical process in all its latitude, the subject and object are exactly correspondent. The only adequate object therefore for the

Absolute consciousness is the Absolute, which must therefore be the primary or immediate object of such a consciousness: other objects, *e.g.* Phantasms, being indirectly known as logical functions of the Absolute because of its logical reference to them.

Reality then, as we conceive it, is a graded logical system, the content of an Absolute consciousness. This consciousness has itself for its primary object, but in itself it knows—because of its logical reference—the non-absolute. The Absolute, therefore, as such, is not the whole of Reality, but is the culmination of Reality, or, shall I say, its centre. It falls within Reality, but it falls within it not as a part within a whole but as its absolute, its whole ground and reason. The non-absolute is known *in* but not *as* the Absolute.

I will now proceed to prove a series of propositions in part further explanatory of the results already reached in first breaking fresh ground.

That the Absolute exists.—The question whether the Absolute exists, I take to be equivalent to the one, Is your construction true of our world, *i.e.* "that with which we come into contact in perceptive experience," etc., or is it true only of a world of its own, like the worlds of fiction?

Supposing this restatement to be justified, we must next inquire in what way the existence of a content is dependent on its being one tissue with our world. Is it because the given has some intellectually inaccessible quality in virtue of which it is said to exist and which flows from it to all that is continuous with it, as the sap of a tree flows from the root to the branches? Some such view as this is, I think, held by writers of high authority, *e.g.* by Prof. A. S. Pringle-Pattison, *Man's Place in the Cosmos* (p. 148), where he speaks of 'the background of feeling which constitutes the Being of the world'—this background of feeling is the presentedness of the given viewed from its subjective side. This view, however, we must reject. Either the Being of things is something about them we can intellectually isolate and make an idea of, in which case it is a function of a complete logical system, so that it can be derived from the internal necessity of such a system and does not belong incommunicably to the given *quâ* given; or else it is something intellectually inaccessible, and in this case it can never enter into judgments, so that we can never have any right to affirm or deny existence. As for the view (if any one holds it) which allows existence by their own right to sense presentations and to all by transfusion, it is too obviously anthropomorphic to need refuting.

Now consider—*our* real world—the real world of common sense is most clearly a function of *the* real world, the all-inclusive system which forms the content of metaphysic. Further, for us it is the central or pivotal function and so symbolic of the whole. It seems then that continuity with our world is demanded of the existent, because our world is a function of ultimate Reality. The existent is, as it were, equated with ultimate reality *via* our world, which is used as the middle terms as in A is B: B is C: A is C.

Notice that everything nameable exists in some character or other. Rebecca exists in *Ivanhoe*—the chimera bombilans in *vacuo quæ comedit secundas intentiones* exists too—in our fancies while we fancy it. Nothing itself is *ens rationis*, it is something—namely nothing. I suggest therefore that when we ask, when a certain content exists, we mean—Is the view of Reality, in which it occupies such and such a place, *pro tanto* final and irreformable? would the whole construction of a wider and more detailed conception spread out concentrically from this as from a centre, or would the world of the content in question turn out to be a sub-world needing an epicyclic connexion to bring it into its place in real reality?

On this interpretation of the question, Does the Absolute exist? will mean—Is our system as exposed in this essay ultimate and all-inclusive?

This question I answer in the affirmative because:—

(*a*) Starting from any content whatever, the mind comes to rest finally in the system as has been shown.

(*b*) Starting from the system any content whatever may be conceived as an integral function of it. It is common enough in scientific inquiry that what was at the beginning an outstanding difficulty against some generalisation becomes in the light of more knowledge an instance of it. For example, according to Darwin's theory, species of the same genus should (other things equal) differ in proportion to their distance apart. An apparent exception occurs when such species inhabiting two neighbouring islands nevertheless differ very widely. Then investigation shows that these two islands have water of ocean depth between them, and so must have been mutually inaccessible for land-crawling animals for long ages; so that, though the actual distance is but small, what the law aims at and what in the ordinary course is secured by distance apart is secured. In this way the exception becomes an instance.

This we may generalise.

Ignorance is the logical beginning of knowledge. If therefore in relatively complete knowledge a function (A) is known

as the immediate object, a function (not-A) will also be known in this knowledge as the indirect object; or to put it otherwise, not-A will be known in complete knowledge as immediate object to the ignorance corresponding to this knowledge.

Applying this to the universe at large: If in complete knowledge the immediate object is A the Absolute, the indirect object will be not-A the non-Absolute.

All Reality will be known as a system of A and not-A, or rather as a system A—not not-A. Now, since A and not-A are in pure contradictory opposition, any content whatever can without distortion or being subject to any kind of stress be placed in such a system. That is to say, any content whatever is not merely included in the system and subsumed under its law, but *is* one tissue with it.

That the Absolute knows.—This proposition was dealt with somewhat summarily at the beginning; I return to it here in order to amplify.

An intelligible *suggests* an intelligence.

Now, though contents taken separately do not logically involve all they suggest, this is because they also suggest the opposites. That is to say, the suggestion is really subject to conditions—to interference from outside, but where Reality as a whole is the subject of a suggestion there is no outside whence interference can come, and therefore the suggestion is satisfied in fact.

To illustrate this we may compare the universe to a picture, or again to a drama, or to a decorative design, in each of which the place of each item is dictated by the idea of the whole. Now suppose in a picture partly covered over one saw a man staring fixedly in a certain direction, the primary suggestion would be of an object in that direction *in the picture*, but if the picture represented the imaginary terrors of a murderer visible to no eyes but his own, the satisfaction of the idea of the picture as a whole would require the frustration of this primary suggestion, and therefore though viewed in isolation the primary suggestion is frustrated, yet since the frustration of this primary suggestion is part of the satisfaction of the whole suggestion, the picture as a whole has all its suggestions satisfied.

In the same way a broken sentence may be an integral function of a complete tragedy, and a broken column is a common form of a complete monument. And in Eastern decorative designs, broken and isolated lines, bits of curves, scrolls, etc., contribute to the completeness of the whole, and very well typify the Eastern conception of the created universe as leading nowhere.

Because of the natural logical implication of subject and object the perfect intelligible (in which all implications are satisfied) implies a perfect intelligence relatively to which the various grades of Reality are as they are in their logical structure. The maintenance of this coincidence requires the identification of the perfect intelligible with the supreme intelligence—the Absolute.

In treating of error I showed that the whole content of error, as referred to the object, is capable not merely of being allowed for, but of being taken up in its proper integral and distinctive nature into a higher truth. The same is true of error as referred to the subject, and because the erroneousness consists in the limitation, the subject must be finite. As therefore all finite contents are indirect objects to the Absolute consciousness, so also are the minds which in judging ignorantly, inadequately or erroneously, identify themselves with such contents.

But while error as referred to the object is an indirect object at one remove only to the Absolute consciousness, error as referred to the subject is doubly indirect, being known in and through its proper subject.

That the Non-Absolute is real.—It is so because it is a logical function of the absolute system.

I wish here to direct attention to the difficulties in which the view of Mr. Bradley that the non-absolute as such is unreal and that the Absolute is the inclusive whole involves him.

Because of the logical correlativity of subject and object, the immediate object of every intelligence is of a grade correspondent to that of the intelligence. Something of this kind may be seen in the progress of knowledge in a human mind, in that the dependence of Phantasm progressively diminishes as the mind by understanding elevates itself.

Every one has had his moments of mental expansion, in which he seemed to be able to see at a glance the whole ramifications of (say) a system of Philosophy as involved in its characteristic principles.

The type afforded by these intellectual experiences is what we have to serve ourselves of as best we can to conceive Absolute knowledge—a knowledge of Reality, intuitive, pure act, simultaneous, exhaustive.

Because of the inadequacy of our model, in which the process towards a new immediate object involves the dropping out of sight of the indirect object, we are apt to think that in absolute knowledge the content of all kind of sense presentation disappears altogether and Reality becomes in

very deed "an unearthly ballet of bloodless categories". That Mr. Bradley does not take up this position need hardly be said, but he avoids it, not by giving a corrected account of the logical process, but by giving up, or at least by leaving very much out of sight, the view that Reality is primarily a whole of logical functions.

His Absolute has no systematic character, and there is therefore no distributing principle on which to refer to it different classes of contents. As has been shown, the immediate object is to its corresponding mediate object as "A" to "not-A" Mr. Bradley cannot avail himself of the distinction between the Absolute system, *i.e.* the whole content of the Absolute consciousness, and the Absolute as such—an object—the immediate object—within that consciousness, for he denies that the Absolute knows. His Absolute is a mere structureless point of reference. "A" and "not-A" are referred to in it in the same way and by the same title, they cancel one the other and the result is the neutrum.

Thus the harmony achieved in his Absolute (Prof. A. S. Pringle-Pattison aptly quotes, "Ubi solitudinem faciunt pacem appellant," Tacit. Agr., xxx.) is like the harmony which may be said to prevail in a melting-pot, where the distinctive colours, smells and tastes of the constituent ingredients may truly be said to "perish," to be "swamped," "submerged," "fused," "engulfed," "blended past recognition," "suppressed," "absorbed," "run together," "destroyed," "transformed," "neutralised," as are appearances in Mr. Bradley's Absolute.[1]

For us the Absolute *is* the product of a logical process, for us (since we have no direct or specific experience of it) it loses not merely an incidental quality but its definition and essence, unless we consent to regard it as at the limit of a process of which sense-presentations form the terminus *a quo*.

It *is* the Absolute to these appearances. Mr. Bradley seems to me to fall into an extraordinary error on this point. He insists that nothing is lost in the Absolute, that failure, error, strife, the exclusiveness of the "this" and the "mine" though fused, submerged, blended, suppressed, etc., as such are nevertheless not lost, because by each resolution the Absolute gains some product. Now it is quite true that the Absolute (as conceived by us) does gain something—becomes richer every time we refer to it a new class of appearances.

[1] Fancy a lady's feelings if, getting caught in a shower, the colours of her dress were 'harmonised' by being 'run together'.

It is true also that all that is in appearances is found *in a sublimated form* in the Absolute as in a subject. But in this sublimated form it is a product—a product connotes a process, a process two terms negatively related, a process which ends in, must begin out of the Absolute. The product will necessarily be for all mind "the product of the resolution of these elements," and it will therefore involve a reference to the elements as unresolved, *i.e.* in their special or proper natures.

That the Absolute exists necessarily and that the Non-Absolute does not exist necessarily.—Before entering on the proof of this I must set down some definitions.

Abstract Idea.	Content which has not only that incompleteness which is essential to ideality but which is also incomplete as idea.
Essential Being.	Content which is complete as idea so that any further expansion must be from ideality onwards to existence. This expansion is not a process, since its terms are in contradictory opposition, as the following definitions of possible and actual Being will show.
Actual Being.	Content referred to its final place in Reality.
Possible Being.	Content denied of its final place in Reality.
The Absolute system.	The whole content of the Absolute consciousness *quâ* system of differences.

To prove the proposition we must consider the structure of Reality as disclosed in the logical process, *viz.*, a system of differences (the Absolute system) within which the Absolute as such is the ground or logical *prius*. From this it follows at once that the Absolute as ground and presupposition is necessarily referred to its final place in Reality and therefore that It necessarily exists.

In respect to the consequent differences—the non-absolute -the case is different.

These differences are formally consequents and are therefore in negative relation to antecedents.

This outstanding negativity proves that the Absolute system considered as appearing in these connexions is not finally determined since relations of antecedent and consequent are hypothetical. Antecedent and consequent belong as it were to an Absolute system *in fieri*. Given the under-

lying system and given the antecedent, the consequent follows necessarily, but, if the consequent *follows*, the system is further determined by its appearance and therefore the ground is changed and the sequence altered.

Relation of antecedent and consequent hold *within* a system. All inference holds *within* a system. Therefore a system of antecedents and consequents is necessarily a subordinate system, and no content is finally determined within such a system, except the ultimate ground which is within such a system as its logical presupposition and which is therefore literally an absolute necessity.

The difficulty of this question must be my excuse for attempting a further explanation.

(1) If A then B holds within system C; (2) If C then A-B within system D; (3) If D then C-A-B within system E, and so on *ad infinitum*.

But "if A then B" after all asserts something absolutely, therefore it does not merely presuppose, it partly supplies its ground. If we conceive a knowledge knowing all Reality at its roots, knowing *a priori* why such and such fancies and suggestions are possible and why no others are, we can see that for such a knowledge the whole infinite series of grounds and consequences would fall within a system, which every possible connexion would presuppose.

The ultimate system taken as difference would (like the self in self-consciousness) fall within, while remaining identical with itself, taken as ground: taken as ground it would be absolute, and taken as difference necessary—necessary, because involved in every possible connexion, and therefore capable of being exhibited as logical antecedent to every consequent whatever.

When we retreat down a series as 1, 2, 3 above, each succeeding system C, D, E approximates nearer than the last to this all-inclusive Absolute system. This system as simultaneously present to the Absolute consciousness would unite the character of a logical construction with that of an object of intellectual vision. But only in its character of logical construction are its differences referred to their systematic places by logical necessity, and, as explained, this necessary reference is not final and therefore does not import existence.

The expansion of content from Abstract Idea onwards to essential Being is strictly a logical process of which existence is the unattainable limit; the final expansion which attains the limit is not logically motived.

Taking a circle to represent existence and an inscribed triangle to represent the most abstract idea, the logical

process up to essential Being may be diagrammatised by increasing the number of sides of the inscribed figure—the process will always be towards circularity, but because the inscribed figure is bounded by *straight* lines can never reach it. Similarly, the logical process is towards existence, but because a logical system is a system of grounds and consequences can never reach it.

That the Non-Absolute is caused to exist by the will of God—the Absolute Being.—We start from Mr. Bradley's definition of will. "The self-realisation of an idea with which the self is identified." The Idea is self-realising only as identified with the self, and to make this clear I should prefer "Will is the realisation by the self of an idea," etc.

"By the self" is introduced because in so far as other independent causes concur with the activity of the self in producing the realisation of its idea, in so far, that is, as the intention to realise is not the total but only a partial cause of the effect, we do not recognise the effect as produced by will. Now the Absolute, considered as cause, is the cause of causes, it is the centre where all threads of causality meet, it is therefore total cause of all effects so far as referred to it in a way appropriate to its nature.

The Absolute considered as Absolute intelligence is the unity of all ideas, the single, universal representation where all ideas come to unity.

Since *all* ideas (therefore all ideas of effects) are in it, all effects pre-exist in it in idea; since in it all ideas come to unity, all ideas (and therefore the ideas of all effects) are identified with it *quâ* known in its unity.

Putting these two conclusions together we get that the Absolute is cause of all effects and that all effects are realisations of ideas with which it is identified. That is to say, the non-Absolute is caused to exist by the Will of God, the Absolute.

That the act of the Divine Will realising the Divine Ideas is an act of Creation.—Creation is production out of—nothing. The question is, as to whether the Divine Ideas as realised in finite Beings have any thread of real identity with themselves, as unrealised, or as Ideas.

What is formally not not-A is formally A, but the Divine Ideas, as ideas, are formally not not-God (Definition of Possible Being). Therefore the Divine Ideas, as Ideas, are identical with God.

The non-Absolute is that essentially, its non-Absoluteness is its central, fundamental and determining attribute, and it imposes on all that falls within the non-Absolute a de-

termination of non-Absoluteness or finitude as its inmost essence.

For a similar reason all that falls within the Divine Nature is determined as Absolute and Infinite.

Now that which by its whole essence is formally A cannot *change into* that which by its whole essence is formally not-A, for change requires as vehicle an unaffected substratum of identity, and is therefore impossible where the negativity of two terms penetrates their *whole* essence. It follows that the existent non-Absolute is produced out of nothing, that is to say, it is created.[1]

Let us then conceive the Divine Consciousness contemplating the Divine Essence, and so having before it the world in its essential Being. This world though it is conceived in entire abstraction from both actuality and possibility of existence is essentially not-God. But though we may pause at, we cannot rest in this abstraction. God in one intuition knows all that is knowable, therefore in that intuition He knows that the world while retaining its negative relation to Himself, as regards Essence, is capable either of receiving or of foregoing negative relation to Himself as regards existence: that is, He conceives it as essentially capable of being actual or possible.

He conceives also still in one intuition all the conditions of its becoming actual and all the determinations, *e.g.* as to dependence on His Will, as to this Will being free and as to time. Further, this Act of Will is eternally present to Him and is not as something future. Thus resting in His eternal Self-Knowledge, God has in pure act a knowledge of all possibilities, an immutable knowledge of all changes and their conditions, an eternal knowledge of things temporal and of all their circumstances, and a necessary knowledge of His freedom.

[1] The argument here employed is, in principle at least, due to Duns Scotus.

IV.—IMAGE, IDEA AND MEANING.

By R. F. Alfred Hoernlé.

We are all familiar with the terms 'image,' 'idea' and 'meaning' from their prominence in psychological and philosophical discussions. And one would naturally expect that their technical use had resulted in investing these terms with a definite sense and in determining accurately their relations to each other. Personally, I must confess, that I have found the very reverse of this to be true. I have found not only that different writers use these terms in very different senses, but—what is more perplexing—I cannot help thinking that the same writer often employs them in different senses. And thus from a good deal of philosophical reading I have carried away the general impression that much confusion prevails in the use of these terms—a confusion of which the users themselves seem for the most part to be blissfully unaware. No doubt, it is but fair to acknowledge that after all the confusion may be due to myself, and to my failure to understand what to others is plain. However that may be, I can but give voice to my trouble, in the hope that if the fault should be mine, it may be pointed out to me. But if, as I suspect, others have been perplexed as I have been, they may welcome an attempt to point out the root of the confusion, and to insist on some distinctions which ought never to have been neglected.

To prevent a misunderstanding of my purpose, I would have the reader bear in mind that I am concerned with the sense which the terms image, idea and meaning bear in Psychology and Logic, but that I am not concerned with more ultimate problems of Epistemology or of Metaphysics. I shall, therefore, without scruple use the language of ordinary Dualism and speak, *e.g.* of experience and reality as distinct, of objects as 'independent' of our ideas about them, of past and future as 'real' though we only deal with them through the medium of present ideas, and so forth. In short, I shall

hold myself free to speak dogmatically of many matters which, from another point of view, would legitimately be treated as problems.

A.

There is a well-known theory which distinguishes the image as psychological idea from the meaning as logical idea. Its usual statement is: In every idea we can distinguish three aspects—(1) existence, (2) content, (3) meaning or significance. In other words, (1) the idea exists, *i.e.* it occurs as a psychical fact within the conscious experience of an individual mind. (2) The idea has a certain character or content which distinguishes it from other ideas and other modes of consciousness, along with which it may happen to occur. (3) The idea has a certain meaning, *i.e.* it is an idea of something, it refers to some object or aspect in the real world. The first two aspects of the idea are psychological, the last is logical. Psychology is concerned with the occurrence and the character of an idea regarded purely as a mental event in an individual mind, and its various relations to other events in the same mind. Logic, on the other hand, is concerned with the idea in so far as it has a meaning and is referred to reality, *i.e.* in so far as it is used as a "sign" for something other than itself. In thinking, our attention and interest are wholly centred in the meaning of our ideas, not in the ideas themselves as psychical occurrences. We are concerned with the objects, not with the "signs" which represent the objects "in our heads". As a rule, we are more or less unaware even of the existence and character of these signs, and it requires a special effort of introspection to bring them before consciousness. But in thus making objects of these mental signs, we must, it seems, employ another set of mental signs, and so on *in infinitum*. In short, in Logic we have to do with what may be called objective thinking, *i.e.* thought in its reference to objects, thought as a medium of knowledge. In Psychology, we study thought in abstraction from this objective reference as a mere process in an individual consciousness. Psychologically the idea is an image, logically it is a meaning. Thus in thinking of a horse, I must distinguish on the one hand a psychical image, *i.e.* a present modification of my consciousness consisting in a more or less vivid and complete 'revival' of the visual perception of a horse, and on the other hand, the horse itself, as a real creature in the real world, which consumes so much food a day, which I can ride, for which I have paid much money, and which will finally be made up into sausages

for the East-End. In other words, I think of the real horse by means of my horse-image.

All this seems beautifully clear. And I have spent so much time over an elaborate statement of a theory with which most students of philosophy will be familiar because it is the most consistent of which I am aware, and will therefore supply the best possible basis for the criticisms which I have to make.

I must say at once, that there is not a single point in the above theory which is satisfactory, or can be accepted as it stands. Indeed, the difficulties by which it is beset and the problems which it raises are so numerous that the critic is almost embarrassed to know where to begin.

In the first place, we must discuss the relation of the image to the meaning as represented by the theory. I have spoken above as if 'meaning' and 'object' were interchangeable terms. That, no doubt, would be the simplest assumption. The image, in that case, would be the mental event 'in my head,' and the meaning would be the 'real object'. I may illustrate this by a quotation: 'A lion is the symbol of courage, and a fox of cunning, but it would be impossible to say that the idea of a fox (= fox-image) stands for cunning directly. We mean *by it first the animal called a fox*, and we then use this meaning to stand as the sign for one quality of the fox.'[1] The words which I have italicised plainly imply a distinction between the psychical image and the real animal which we mean by means of the image. This, of course, suggests a question as to the nature of this link between image and object, and as to its recognition by the mind. The explanation offered, if I understand it right, is that *part of the content of the image*, set apart and fixed by the mind, *is itself the meaning*. Such at least appears to be the sense of the following continuation of the above quotation: 'Just as the image or presentation of a fox is *taken by us in one part of its content*, and referred away to another subject, so this meaning itself suffers further mutilation: one *part of its content is fixed by the mind* and referred further on to a

[1] Bradley, *Logic*, p. 5. I wish it to be understood that I am quoting this and other passages merely as illustrations. I am not to be taken as criticising Mr. Bradley. For Mr. Bradley, by refusing to have his *Logic* republished, has indicated that he has in important respects changed his views. And the theory which I am criticising therefore may no longer represent what he really holds. It is for me simply 'a' view which happens to be found in one of Mr. Bradley's books; but it is not Mr. Bradley's view. I should like to refer the reader in this connexion to Mr. Bradley's footnote in the last number of MIND (N.S., 60, p. 446), which I have seen since writing the above.

second subject, *viz.*, the quality in general, wherever found'. And again, 'that connexion of attributes we recognise as horse, is one part of the content of the unique horse-image, and *this fragmentary part of the psychical event is all that in Logic we know of or care for*'.[1] The words in italics, if taken literally, are so astounding that one would fain believe them to be a mere slip. Granted even, that in judgments about a horse we make use of a more or less complete horse-image (which is by no means the case), it is surely nonsense to say that merely a fragment of an image, itself fragmentary, is used as meaning. On the contrary, it would be truer to say, that our meaning is far *fuller* than anything contained in the image. But one can see how the mistake arose. An image usually contains much that is irrelevant, and not, therefore, 'used as meaning'. Thus, if we think of death by means of an image of a 'withered flower,'[2] it is clear that we do not wish to ascribe to death *all* the characteristics of the dead flower, but only its deadness. And this is said to be (*a*) singled out and 'fixed on' by the mind and (*b*) 'referred away to another subject'. These seem to be the two stages of the mysterious process of meaning one thing by means of another. But I doubt whether this gets us any further. Suppose I want to think of the colour 'red'. I may have an image of a circular red patch, or a red flower, or a drop of blood. But, of course, I do not mean these images as wholes, I mean merely the quality of red in them. That I 'fix on'. But how does that help me? The redness of the image is not the colour red-as-such which I mean. It is a particular quality of a particular image. No amount of analysis of the image, or of fixing one's mind on the redness of the image, will make that redness universal. It is, and remains, the redness of that image, and the more we fix on it, the more we succeed merely in meaning that particular red, and not redness as such which we want to mean. The meaning lies beyond the image, and no operation on the image will get us to the meaning. And, in any case it is unintelligible how this particular element of a particular image should lose its particularity by being 'referred away to another subject'. Berkeley and Hume were no doubt mistaken when they attempted to define a universal as a 'particular idea with a general signification'. But I fail to see that our metaphors about 'fixing on' part of an image and 'referring it away to another subject' are any more successful. There is no way of deriving a universal

[1] Bradley, *Logic*, p. 6. Italics mine. [2] *Ibid.*, p. 9.

meaning from what, as a mental occurrence, must always be particular. And there are other difficulties. According to the theory I can think of a horse as actually seen with the bodily eye only by means of an image of the horse. But the image manifestly lacks many of the qualities of sense-perception. Yet I succeed in meaning by the image not the horse as imaged but the horse as seen.[1]

But there is no need to go into details. The theory derives such plausibility as it possesses from the fact that it considers only that class of mental 'signs' which is composed of images in the strict psychological sense of the word, *i.e.* 'revivals' of visual, tactual, auditory sense-perceptions. Except for this arbitrary restriction, the identity (partial or total) of content in sign and thing signified could not be maintained. Yet it is made the corner-stone of the theory, when the mind is said to 'fix on' part of the content of the image and refer it to another subject; or to put it in plainer language, when the content is treated not as a qualification of the image but as a qualification of the real object which we 'mean'. We have nothing to qualify reality with except the contents of our minds, our imagery, which we 'divorce' and 'cut loose' from its existence in the mind so as to weave a garment for reality out of it. That this identity of content, even so far as it exists, is wholly insufficient for the purposes of the theory, I have shown above. Now I shall have to mention a far more serious difficulty. How, on this theory, are we to explain the thought of all those persons who are defective in imagery, and think mainly with the help of words? And indeed, how are we to deal with language, with all those cases in which words are used as 'signs' for meanings? We can surely not say that the content of the word (or verbal image) is 'fixed on' and 'referred away to another subject'. As Prof. Stout[2] says: 'It is, of course, sheer nonsense to say that the specific nature of what we think of, when we thus think in words, is constituted by partial features of the content of the words themselves considered as auditory-motor or visual-motor complexes'. And, finally, what imagery can be suitably suggested for highly abstract terms, such as 'unity,' 'difference,' 'spontaneity,' 'reciprocity,' etc.? For such meanings words are the only

[1] For further examples and a fuller criticism of the theory that there must be identity of content between the psychological and the logical idea I may refer to an extremely interesting article by Prof. Stout on "Mr. Bradley's Theory of Judgment" in *Proceedings of the Arist. Soc.*, N.S., iii., 1902-3, pp. 8-13.

[2] *L. c.*, p. 12.

signs, but in what sense the content of the word and the content of the sign can be said to be identical, it is impossible to see.[1]

However, even if I assume all these difficulties not to exist, I am unable to convince myself that the theory gives a true account of what happens when we think. And as the conclusion to which I have come on this point differs somewhat from those usually accepted, I must be permitted to set it forth at greater length. In the first place, an idea or image which is not an idea or image *of* something, is not, even psychologically, an idea at all. Indeed, I should be prepared to uphold the paradox that there is no idea, or combination of ideas, which is wholly meaningless. An idea always carries with it a relation to something other than itself. Thus, I should say, even 'square circle' is not meaningless. Each element of the complex has its own definite meaning. And though they refuse to join into a harmonious whole of meaning, as *e.g.* 'equilateral' and 'triangle' do, the whole signified by square circle is a whole characterised by extreme inner conflict of its elements, and this conflict, this refusal of the elements to be joined, is an experience as distinct and definite in its way as the experience of the blending of 'equilateral' and 'triangle'. And hence the words 'square circle' cannot be called meaningless, as if the words conveyed nothing beyond their own sound, and left the mind a sheer blank but for their own presence.[2] There is then, even for psychology, no idea or image which does not carry with it a meaning. Our consciousness of the idea involves our consciousness (more or less explicitly) of its meaning, and the ideas with which Psychology deals are not mere signs without signification. In other words, ideas are understood, and, as I have already mentioned, in ordinary thinking our attention is not directed always or even mainly to the ideas, but primarily to their meanings. And it is only when we

[1] James, *Principles of Psych.*, i., p. 471 ff., also criticises the view that 'ideas, in order to know, must be cast in the exact likeness of whatever things they know'.

[2] The nearest approach to a blank would be constituted, I suppose, by a string of 'meaningless' syllables, *e.g.* by a word from a foreign language, of the meaning of which we are wholly ignorant. But even here, there is observable a continual *tendency* of the mind to pass beyond the mere word, to some other content which might be its meaning, though this attempt is continually baffled, and the mind driven back on the mere sound. By the way, would a 'pure' sensation, if such a thing existed, be a sensation of anything? Strictly speaking such a sensation would be *e.g.* a blue sensation but not a sensation of blue. The objective reference presupposes an act of distinction, turning the content of the sensation into its 'object'.

fail to understand, that the idea itself (the word or image) becomes prominent in consciousness. In short, no idea is a 'mere' idea, the cognitive function, *i.e.* the relation to something which it means, is essential to its very being.[1]

Both the idea and its meaning, then, must be present to consciousness. Or, perhaps, it would be more accurate to say that they form together a complex psychical whole, a 'psychosis' of which the different elements, however, enjoy different degrees of prominence in consciousness, or draw upon themselves different amounts of attention. To use the convenient phraseology of Prof. Lipps, the whole is 'perceived,' but only some parts of it are 'apperceived,' or as Mr. Bradley would say, 'fixed on'. Normally we apperceive merely the meaning, and the image or sign remains in the background, in the shade, as it were. But, of course, we can make the image or sign the special object of attention; we can 'apperceive' it, and correspondingly the meaning falls into the background. But it does not disappear, it remains in consciousness. Even when the psychologist studies the character and behaviour of his own images he is always conscious that they are images of such and such an object. It is their image *of* a breakfast table which Prof. James' pupils describe.[2] Thus the distinction between image and meaning would seem to be mainly one of the emphasis with which attention is directed now to one element, and again to another, of a complex psychic whole. And it is not at all essential that there should be, as in the case of the present example, and indeed of all images, a relative identity of content between image and object. Complex wholes of sign and meaning may be formed without any such identity whatever, as the use of words clearly shows. The sound of a word, and the sensations of throat-, lip-, tongue-movements in pronouncing it, have no identity of content with the object meant, and yet the word and its meaning can form a psychic whole, in which either the meaning or the word can be more prominently 'apperceived'.

And here I must be permitted a short digression. Psychologists have not, I think, sufficiently observed that the complex of word-meaning is *not formed by mere association.* The understanding of a word, *i.e.* the use of the word as a 'sign' for its meaning, is something altogether different from the associative passage of the mind from one to the other, even

[1] I shall amplify this statement lower down, more particularly with reference to the 'ideas' of imaginary objects and their meanings.

[2] *Principles of Psych.*, ii., pp. 56-7.

if such passage should be regular and uniform. This is beautifully illustrated by the account of the way in which Helen Keller learned to understand that words (in the manual alphabet of the blind) have a meaning, and to use these word-signs to convey her own meaning. Of course, she used signs, such as gestures and screams, long before she learned to speak. And, as she was thus familiar with signs, it is the more curious that for a long time after she had learned to imitate various word-signs and to associate them with the right objects, she did not understand that these signs *meant* the objects. Miss Keller's teacher, Miss Sullivan, used to spell into her hand the names of things which she might be handling at the time, succeeding thereby in forming associations, but not succeeding at first in producing understanding. Thus she tells[1] how on one day she spelt 'c-a-k-e' and then gave the child a piece to eat. On the next day, when the child was busy over a sewing-card, she began spelling 'c-a-r-d,' but when she had got to 'c-a' the child impetuously pulled the teacher's dress and pointed downstairs, obviously wanting her to fetch some cake. The 'c-a' revived the 'cake' of the previous day, and that led to a demand for the article. But the process was purely one of association, and there was no understanding that 'c-a-k-e' *meant* cake. This is shown clearly by the following quotations from Miss Sullivan's letters: 'Helen has learned several nouns this week. "M-u-g" and "m-i-l-k" have given her more trouble than other words. When she spells "milk" she points to the mug, and when she spells "mug" she makes the sign for pouring or drinking. . . . She has no idea yet that everything has a name.'[2] And again we get this glimpse of a daily lesson: 'I gave her an object, and she spelled the name . . . and made the sign for cake (it did not occur to her to spell the word)'.[3] What is characteristic is that she uses *her own* signs to convey her meanings, and not the word-signs which she has learned to associate with certain objects. The thing might suggest the word, and the word the thing, but there is no consciousness that the one means the other. This is Helen Keller's own account of how she discovered that words have meanings:[4] 'Some one was drawing water and my teacher placed my hand under the spout. As the cool stream gushed over one hand she spelled into the other the word *water*, first slowly, then rapidly. I stood still, my whole

[1] *Helen Keller, The Story of My Life*, p. 305 ff. [2] *Ibid.*, p. 312.
[3] *Ibid.*, p. 315. The cake was the child's reward for obedience.
[4] *Ibid.*, p. 23.

attention fixed upon the motions of her fingers. Suddenly I felt a misty consciousness as of something forgotten—a thrill of returning thought, and somehow the mystery of language was revealed to me. I knew then that "w-a-t-e-r" meant the wonderful cool something that was flowing over my hand.' This occurred a considerable time after she had learned to spell the names of certain objects, and even to connect the right names with the right objects. The understanding of the meaning of a sign, therefore, implies more than an association between two distinct mental elements; the elements must be fused into a new psychic whole, in which they are simultaneously present though with different degrees of prominence.

This view of sign and meaning as forming a psychic whole enables us to dispose of a difficulty which was a great puzzle to an older generation of psychologists. Turning round upon their own minds to discover what was really present there when they thought of anything, they were much astonished to find there merely signs, and *nothing beyond the signs*. All trace of the meaning, the object, seemed to have vanished. More particularly was this the case where the signs consisted of words. Images seemed at least to carry with them something of the substance of their objects, however attenuated and shadowy, but words apparently brought before the mind nothing but their own sound and look, and if you asked for their meaning, *other* words were all that you could find. Did you think of 'love'—what were you conscious of except the sound of the word, or perchance the words of some definition that might occur to you? Where was the thing itself and how were you conscious of that?

The mistake which Hobbes and Hume and Dugald Stewart and many others made in putting the question in this way, was that they broke up the psychic whole of sign and meaning, and fixing their attention purely on the sign, tried vainly to convince themselves that this miserable remnant was itself the whole. Instead of holding fast to the patent fact, that in ordinary thought they did succeed in giving meanings to their thoughts, they asked themselves the absurd question, what are we really conscious of when we are conscious of meaning something? And having forced themselves by the very formulation of their question to look for something other than the meaning, they could of course find only the empty shells which had contained that meaning. They proceeded, as Prof. Stout wittily says, like men looking for spectacles which are on their noses all the time. Signs are always sensational in nature, whether they are actual sensations (as

in sense-perception) or ideas (images or 'revived' sensations). Words are nothing but complexes of kinæsthetic, auditory, and visual sensations and images, and the same applies to all other signs. But the fact that a significant psychic whole contains as a subordinate factor these sensational elements, and that such a whole apparently cannot be present in our consciousness without the help of such elements, in no way entitles us to treat them as the only solid and substantial factor, the only objective content, as it were. I have exposed this fallacy due to a misuse of introspection at some length, because even psychologists who in one direction have recognised and avoided it, have fallen victims to it in another. Thus it appears to me—if I may digress once again—that Prof. James' theories of Emotion and of Mental Activity both involve the fallacy of taking the sensational elements of complex psychical wholes as constituting those wholes. When Prof. James identifies an emotion with the various organic sensations and feelings arising from the symptoms of its bodily manifestation,[1] or again when he identifies our experience of activity with the muscular sensations that accompany it,[2] he is undoubtedly guilty of not accepting the first-hand evidence of his own inner experience, but offering to us instead a mangled extract of sensational elements. Says Prof. James: 'It is difficult for me to detect in the activity any purely spiritual element at all. Whenever my introspective glance succeeds in turning round quickly enough to catch one of these manifestations of spontaneity in the act, all it can ever feel distinctly is some bodily process, for the most part taking place within the head.' Yet in speaking of 'meaning' the same Prof. James had wisely said: 'The sense of our meaning is an entirely peculiar element of the thought. It is one of those evanescent and "transitive" facts of mind *which introspection cannot turn round upon*, and isolate and hold up for examination, as an entomologist passes round an insect on a pin.'[3] Is an emotion or a feeling of activity in any way less a 'peculiar element' of our experience? Or does Prof. James really think he has succeeded in pinning these experiences down, and walking round them introspectively? The consciousness of an emotion is no more the same as the consciousness of 'quickened heartbeats,' 'shallow breathing,' 'trembling lips,' 'weakened limbs,' 'visceral stirrings,' than the consciousness of the meaning of a thought is identical with the conscious-

[1] *Princ. of Psych.*, ii., pp. 451-453.
[2] *Ibid.*, i., p. 299 ff. [3] *Ibid.*, i., p. 472. Italics mine.

ness of the word or image or other sensational element which serves as its 'sign'.

I hope this digression has served to make clear the sense in which I have spoken of a sign and its meaning as forming together a psychic whole. But, unfortunately, this account is itself beset with difficulties. The distinction between sign and meaning is usually not regarded as merely a distinction between different aspects or elements of a whole, but as a distinction *between distinct and separate existences.* And, as a rule it is even implied, that these existences belong to different orders of being, that the sign is always psychical, but the thing signified material.[1] Thus Prof. Stout distinguishes in cognition two elements: (i) A thought-reference to something which, as the thinker means or intends it, is not a present modification of his individual consciousness; (ii) A more or less specific modification of his individual consciousness, which defines and determines the direction of thought to this or that special object. . . . In the perception of a tree the reference to an object is circumscribed and directed by a plexus of visual and other presentations. The object . . . is a material thing, not a mental occurrence. . . .'[2]

This is a good statement of what is commonly implied in cognition. The simplest perception is on the one hand *my* perception and on the other hand my perception *of a certain object.* Every idea is on the one hand *my* idea and on the other my idea *of something.* Every act or process of cognition contains these two aspects inseparably within itself, and it is perhaps the greatest and most difficult of all philosophic achievements to keep the unity of these two distinctions steadfastly in view. The difficulty emerges as soon as we attempt to give a more detailed account of the way in which the two aspects are related one to the other within the single cognitive act. Do we look first at the perception or idea *qua* being mine? Then the object appears at once merely as a part or qualification of this particular modification of my consciousness. It serves to give that content and character to the perception or idea by means of which we distinguish it from every other perception or idea. Do we look next at the object? And lo, it seems to owe all content and character to perception, thought, consciousness. Do we try to define them so that they may be distinguished? Then we are in danger of making knowledge inexplicable, and

[1] For the sake of simplicity I put this down without qualification. Of course, when we think *e.g.* of an emotion, both sign and thing signified belong to the psychical order of being.

[2] *Anal. Psych.*, i., p. 47.

being left with the insoluble problem, how an idea which is a 'modification of an individual consciousness' can mean an object which is not a modification of consciousness. The only way to escape these puzzles is to take one's stand resolutely on what may be called the self-transcension of consciousness, *i.e.* on the fact that we are and can be conscious of objects whose nature and existence we do not regard as simply identical with the nature and existence of our own states of consciousness. If there is a problem here, it is a problem for Metaphysics. But in Psychology and Logic to take one's stand on anything less than that, ensures from the very start the failure of every attempt to deal with the relation of sign and meaning.

I do not feel sure that the attempt of Prof. James to solve this problem by means of the conception of a 'psychic fringe' wholly escapes the dangers which I have indicated. The considerations which led to the conception, if I understand them right, are these. When we think we are conscious not merely of an idea, *i.e.* of a present modification of our consciousness, but we are also conscious of meaning something by the idea. There is therefore not only the idea, but something *more;* and this something more must on the one hand be in consciousness (for else we should not 'understand' anything by the idea) and again it must transcend consciousness, for else there would be no objective reference. To meet this situation the conception of a 'psychic fringe' is offered.

It is, of course, impossible to deny that this conception describes indubitable psychological facts, and I fully agree with Prof. Stout's admirable account of 'acquirement of meaning' in his *Manual of Psychology*.[1] It is perfectly true that, *e.g.* in listening to a tune or to a sentence, we are not merely conscious of the particular tone or word which we may be hearing at the moment, but that each tone or word carries with it the accumulated after-effects of all previous tones or words, and at the same time predisposes us to anticipate the continuation of the tune or sentence in a particular way. If each word or tone dropped completely out of consciousness, as its successor entered, without leaving any traces of its presence, we should never be able to take in a sentence or tune 'as a whole'. We should be confined to the mere sound of the word, and we may well doubt whether that sound would carry with it any 'meaning' at all. If this be the meaning of 'fringe' no

[1] P. 84 ff.

one can doubt that it represents psychical fact. But what I am reluctantly compelled to doubt is that the conception supplies an adequate solution of the fundamental problem of meaning, *viz.*, the relation of sign and thing signified, the 'objective reference' of the sign. There are passages in Prof. James' *Psychology* in which he says explicitly that the objective reference of the sign *consists* in its psychic fringe. I am very reluctant to assume that he really means what he says, but his language is so emphatic, that I am forced to protest. 'Each word,' says Prof. James, 'is felt, not only as a word, but as having a meaning. The "meaning" of a word taken thus dynamically in a sentence may be quite different from its meaning when taken statically or without context. The dynamic meaning is usually reduced to the bare fringe we have described of felt suitability or unfitness to the context and conclusion. The static meaning, when the word is concrete, as "table," "Boston," *consists of sensory images awakened;* when it is abstract, as "criminal legislation," "fallacy," the meaning *consists of other words aroused* forming the so-called "definition".'[1] In other words, the meaning of 'Boston,' 'fallacy,' etc., consists of the 'fringe' of images and words which are more or less subconsciously present, whenever the words themselves are present. Normally this fringe remains in the background of consciousness, but it can be called up explicitly if need be. Now in the first place, this account is wholly untrue as regards our ordinary consciousness of meaning. For what normally occupies the focus of attention is the meaning, the objective reference, whereas *the sign forms the fringe*, of which we have but a more or less shadowy consciousness. Prof. James exactly reverses the true state of affairs, for according to his theory, the sign should occupy the centre of attention, and the meaning form the vague background.[2] Whether I have images or not, and whether I know the exact definition of a word or not, in ordinary thinking what looms large in my consciousness is the meaning and not the word. And this meaning does not consist in images or in other words. And this brings me to the second and even more important point which I have to make against Prof. James' account. As the account stands, it *would be fully applicable to a solipsistic experience and to extreme subjectivism.* And that, I take it, is the last thing that Prof.

[1] James, *Princ. of Psych.*, i., p. 265. Italics mine.

[2] Prof. Stout, *Anal. Psych.*, i., ch. iv., brings the same criticism against Prof. James, but there are one or two passages where he seems to have slipped into the same mistake. See below, p. 84 *n.*

James intends. On the contrary, I take it, he would heartily agree with the passage from Prof. Stout's book which I quoted above: 'In the perception of a tree the reference to an object is circumscribed and directed by a plexus of visual and other presentations. The object . . . is a material thing, not a mental occurrence. . . .'[1] But the images which according to Prof. James are meant by 'Boston,' and the words of the definition which are meant by 'fallacy,' are, in the context, mental occurrences, and they are nothing else. So long then as the fringe is merely a psychical fact or occurrence, it seems nonsense to say that *it* is the meaning of another psychical occurrence. It amounts to saying that the meaning of a sign is to be found in other signs. But where, then, is the 'thing signified'? The meaning of Boston is emphatically not the images of this or that person, nor even the images of all persons together. Even for myself the meaning of Boston consists not of my images of Boston (supposing that I have any images at all), but of a certain town in America, to which those images themselves refer, and of which they themselves are merely 'signs'. Hence to explain the meaning of an image or word by reference to its 'fringe' and to make this fringe consist of *other* images and words, is not to solve the problem of the objective reference of signs, but merely to put it one stage further back. For the fringe itself, when it is made explicit, is seen to consist but of signs, which would have their own meaning in turn beyond themselves. The only reason why Prof. James is content to accept certain images as the meaning of 'Boston' and a certain definition as the meaning of 'fallacy,' is that these images and words are not mere images and words, but themselves carry meanings with them, and these meanings are not again other images or other words but are the things signified themselves. The images are of value to him, not because they *are* Boston, but because by means of them he can *think of* Boston itself, and connect the word 'Boston' with the actual city. And again the words of the definition of fallacy are important to him not as words, which can be substituted for the word 'fallacy,' but because he can bring before his mind by means of them the real nature of fallacy. Prof. Stout's language in respect to the same problems is far more careful than that of Prof. James: 'It seems certain that the mental state which we call understanding the meaning of a word need not involve any distinction of the multiplicity of parts belonging to the

[1] *Cf.* p. 80.

object signified by it. To bring this multiplicity before consciousness in its fulness and particularity would involve the imaging of objects with their sensory qualities, visual, auditory, tactual, etc.'[1] This passage implies, that both words and images, being signs, involve a reference to objects other than themselves, and it avoids the mistake of saying that because the meaning of a word can be made clearer by *means of* other words and images, therefore the meaning of the word *is* those words and images. The phrase 'psychic fringe' contains a great temptation to commit this confusion. And it may be as well to lay bare the root of the confusion. As I said above, sign and meaning form an indissoluble psychic whole. Yet, on the other hand, when we introspectively analyse that whole, we seem to discover only those sensational elements which constitute the sign. What, then, could be more tempting than to assume that the meaning is present only as a more or less indistinct, subconscious 'fringe'? And what easier than to confuse this non-existent and imaginary fringe with a very real and existing fringe, *viz.*, the fringe constituted by all those words and images with which a given word is associated? *It is an utter mistake to think, that when a meaning is unanalysed and implicit, it is present merely as a 'fringe'.* There is, indeed, a 'fringe,' but it consists of other words and images. And though we must use these to make explicit our meaning, they help us to define it, only because they themselves are signs referring to that meaning, not because they *are* the meaning. The advance from an implicit to an explicit meaning, implies as its instrument the development of the 'fringe' which surrounded the original sign, but this fringe never loses its character as sign, and is in the apprehension of the explicit meaning *always subordinate,* as signs normally are. And the character of the meaning as implicit or explicit, unanalysed or analysed, undeveloped or developed, is not a character of its mental signs at all. These signs, *qua* signs, are neither implicit nor explicit. These adjectives are quite meaningless as applied to signs. Otherwise, we should have to say, *e.g.*,

[1] *Anal. Psych.*, i., p. 79. However, there are other passages in which Prof. Stout seems to have been betrayed into the mistake of which I complain. Thus on p. 83 we are told that the sight of an orange involves more than merely the 'modification of sentience directly traceable to the play of light on the retina'—which is right. But then Prof. Stout proceeds: 'The thing, as a unity in multiplicity, is present to consciousness as a psychic fringe'—which seems to me wrong. The recognition of the yellow patch which we see as an orange, possessing all the other qualities of an orange, is not a matter of 'psychic fringe' whether we explicitly run over those other qualities in our minds or not.

that one man's very full and complete visual image of Boston means Boston more 'explicitly' than the fragmentary, scrappy image of another, whereas experience shows that a person wholly lacking in visual imagery can mean a thing as explicitly as another person with a very highly developed visual imagery.

I have laboured this point at what, I fear, must seem excessive length. My excuse must be that the confusion is widespread, hard to detect, and hard to guard against. And I may now sum up what I regard as the positive results of the discussion up to this point. Sign and meaning are inseparable, both for Logic and for Psychology. Neither knows anything of a sign which is not a sign of something, of an idea or a perception which is not an idea or a perception of some object, whatever order of being that object may belong to. Every idea is a concrete whole of sign and meaning, in which the meaning, even when unanalysed and 'implicit,' is what is essential and prominent in consciousness. The sign, on the other hand, which we saw reason to identify with certain sensational elements in this complex experience, is normally subordinate. And I have called this concrete idea a 'psychic whole,' not with any intention of suggesting or implying that the 'thing signified' is itself necessarily psychic, but simply to express the fact that 'to mean something' is after all a conscious act, and that what I have called the self-transcension of consciousness inherent in all objective reference is something *experienced* by us. The fundamental fact which, at any rate for the purposes of this paper, we may not question or doubt, is that in experience we are conscious of reality. It is but a special case of this consciousness that our ideas have meaning, *i.e.* refer to reality. But we must now turn to a class of ideas which apparently have no meaning and lack all objective reference.

However, before I pass on, I ought, perhaps, briefly to notice one possible objection. I may be told that by speaking of sign and meaning as a 'psychic whole' I have committed the very same mistake for which I have been criticising others, and that my 'psychic whole' is as much a mere mental event, distinct from the object, as the 'sign' of the theories criticised by me. To this objection I can reply only that, in my view, the moment we come to deal with the relation of sign and meaning we are beyond 'mere' psychical events altogether. And, therefore, if any one chooses to say that my phrase 'in experience we are conscious of reality' implies subjectivism, I reject the interpretation and cheerfully leave the objector to make the best of his own mess. Of

course, I am not denying that our signs, *i.e.*, our images, verbal and otherwise, may be studied in abstraction from their objective reference, and that such an investigation belongs properly to Psychology and not to Logic. But I hold it to be manifestly absurd to say that the individual mind, with which Psychology is supposed to deal, is conscious *of signs only* and not of their meaning.[1] On the contrary, I regard the consciousness of meaning as primary and fundamental, and the distinction of sign and meaning as a product of reflexion. And if it be admitted that sign and meaning thus belong together and form in everybody's experience a concrete psychic whole, I do not much care whether the study of these wholes be included in Psychology or assigned to Logic. But what I do contend for is that, if a psychologist deals with meaning at all, it is an appalling mistake to make the sign primary and fundamental, and to degrade the meaning to a more or less subconscious fringe. Or, what is but a more elaborate form of the same mistake, it is absurd first to represent objective thinking[2] as a procession or stream of signs, and then (from an uneasy consciousness that signs must have meanings) to make their meaning consist in other signs, *i.e.* in those parts of the stream which have not yet come into the focus of consciousness. This is the sum and substance of what I have been contending for so far, and with this restatement I think I have earned the right to proceed.

B.

The result of the previous section might also be expressed by saying that the distinction between sign and meaning, in the sense in which we saw reason to maintain it, is by no means coincident with the common distinction between idea and reality. And this is the second main point with which I wish to deal. There is a widely spread view according to which the distinction between idea and reality is a distinction between 'mere' ideas and facts, or, to put it differently, between ideas that have no meaning or objective reference and ideas that have. When, *e.g.*, we speak of a view which is in conflict with the facts as a 'mere idea,' or when we contrast dreams and imaginations with reality, we mean according to this view that these ideas are mental occurrences and nothing more, that they refer to no objects, that they are, as it were, mere pictures in somebody's mind without

[1] This assertion, as we have seen, is implied in the view with a criticism of which I began this paper. *Cf.* p. 71.

[2] *I.e.* thought referring to objects.

counterparts in the real world. This view seems to me radically false. A careful analysis of an imaginary idea or a dream-picture will reveal in it exactly the same three aspects which characterise our ideas of real objects. My idea of a centaur, a sea-serpent or an angel is characterised by (1) existence, (2) content, (3) meaning, as much as my idea of a horse, a snake or a human being. And the imaginary events of a novel are as little events merely in the author's head or the reader's head, as any historical event like the Battle of Salamis or the French Revolution. To a child the events of fairy-tale are as 'real' as the events of ordinary life; to the primitive mind a myth is a tale of 'fact' as much as to us a historical or scientific statement. These facts suggest, indeed, that at a certain level of mental development the distinction between a 'real' and an 'imaginary' world has not yet arisen. But they suggest *also* that real and imaginary experience are made *of the same stuff*, as it were, and that whatever the principle of distinction between them may be, it cannot be that in the one case our ideas have objects and in the other they have not. The golden mountain of fairy-tale is as little identical with my image of it as the real mountain is identical with my image of it. In the one case, as in the other, there is a 'thought-reference to something which as the thinker intends it is not a present modification of his individual consciousness'. And since, then, all ideas, imaginary no less than others, involve an objective reference as part of their very nature, we seem driven to say that there are objects which are real and *objects which are unreal*.[1] We must frankly admit that we can be concerned with unreal objects, and that those ideas which deal with unreal objects do not deal with no objects at all, *i.e.* are not ideas without any objective reference whatever.

It is not my business here to investigate the principles on which we distinguish real from unreal objects, or again different kinds of unreal objects[2] from each other. But I

[1] I must beg the reader to remember that I am not talking Metaphysics, but maintain throughout this paper the point of view of 'ordinary common sense'. In the metaphysical sense of reality *all* kinds of experience go to make up the material of reality. *Cf.* Mr. Bradley's *Appearance and Reality*. I would add also that the above was written before I had seen Mr. Bradley's delightful article on 'Floating Ideas and the Imaginary' in the last number of MIND (N.S., 60). Though my phraseology differs considerably from his, I hope I am right in thinking that my view, though much more crudely and shortly expressed, does not in substance differ very seriously from his.

[2] Such as, *e.g.*, dreams and creations of the imagination, and again hallucinations and illusions and hypnotic suggestions.

will try to enforce my view by indicating some of its implications. In the first place, all unreal objects have a tendency or claim to be accepted as real. It is only because they have come into conflict with, and been rejected by, my real world that I am compelled to think of them with the mental proviso 'unreal'. Except for that conflict there would be no distinction between them, for, as I put it above, they are of the same stuff. I do not mean, of course, that we accept every day-dream as real until it comes somewhere into violent conflict with reality. Mature minds are so familiar with the distinction that it is made almost automatically. But every one will be able to recall sad occasions in his childish days on which he discovered that some beloved figure of fairy-tale could have no place in the real world, and would henceforth have to be labelled 'unreal'. This experience could not have come to the child but for his firm belief in the reality of the fairy-figure and the subsequent conflict of that belief with 'facts'.[1] One might express this tendency towards reality of imaginary objects by calling them 'possible' rather than unreal objects. And one might suggest that there are degrees of such possibility according as the content and character of the imaginary objects is less or more at variance with the content and character of real objects. And from this point of view one might say of art and the creations of the artistic imagination that the highest art is not that which most faithfully copies what one may call historical actuality, but that the objects of which possess the highest degree of possibility in the above sense. We may embody more or less of the spirit and essence of reality in the products of our imagination, and the more we embody the more will the unreality of our imaginations seem a mere accident. Indeed, it seems necessary to the full enjoyment of a novel or a play that we should get the 'illusion' of its reality, *i.e.* that we should, for the moment, abandon ourselves to its claim to be real, and forget its conflict with our

[1] My point is that in many cases it is essential to the child's enjoyment of the imaginary that it should *not be recognised as imaginary*. To most children, I think, at a certain time of life, the events and persons of fairy-tales are *real* events and *real* persons, and when this illusion is laid bare, interest in this now discredited type of the imaginary is apt to vanish. It is but rarely replaced by conscious make-believe. Thus, to give an instance from my own experience, I believed, like most German children, at one time firmly in the existence of the Christ-child as a bringer of presents at Christmas, to whom a letter setting forth my wishes had to be duly despatched. This practice ceased to interest even as 'play' and 'make-believe' when its foundation was discovered to be imaginary.

real world. But this illusion of reality would be impossible unless imaginary objects had a tendency towards reality which is checked only by their conflict with reality, and asserts itself as soon as we disregard that.

In the second place, I may support my contention by an illustration from the nature of wish. A wish (as against a desire) involves the presence of an imaginary idea, *i.e.* an idea which is not objectless, but which is so disconnected with our real world, that we regard its object as 'unreal' or rather as incapable of realisation. Yet a wish, as Mr. Bradley and others have well shown, 'entails logically, and it *continually in fact tends to pass into*, an actual desire'.[1] In desire we have an idea regarded as capable of realisation, so that we have here a strict parallel between the tendency of a wish to pass into desire, and the tendency of the idea of an unreal object to pass into the idea of a real object. And again, just as we can maintain a wish only by suppressing the collision of its idea with reality, so the abandonment to a work of imagination implies forgetfulness of its unreality.

And I may repeat now the positive contribution of this section to our discussion. The distinction between idea and reality is not a distinction between a mental fact which has meaning, and a mental fact which has no meaning. All ideas refer to objects, and the division of these objects into 'real' and 'imaginary' has no basis in the character of the ideas as mental events.

C.

But there is another problem concerning the relation of ideas to reality which is of the utmost importance, and on which considerable confusion seems to prevail. We are all familiar with a view, often explicitly expressed and yet more often unconsciously presupposed, according to which the 'ideal' character of an experience *ipso facto* disqualifies its content from being real. An ideal content, it is said, by its very nature lacks reality; it cannot stand on its own legs, as it were; it is abstract, whereas reality is concrete, etc. In short, in so far as our experience works by means of ideas we are removed from contact with reality. Whatever we apprehend ideally cannot as such be real. I cannot attempt here to follow out in detail all the developments to which this principle has led in the history of philosophy, such as the view that only particulars are real, whereas universals,

[1] F. H. Bradley, "The Definition of Will" (iii.), in MIND, N.S., 49, p. 17. Italics mine.

relations, laws of Nature, etc., are 'merely' ideal, and therefore not real. I will discuss only two applications of the principle. 1. In the first place, the contrast between idea and reality is taken to be a contrast between present reality and something which in one sense or another is 'not present'. Thus the past and the future are usually said to be 'ideal' as against the reality of present experience; and again in volition we have the opposition between my present state and an idea of change, the 'realisation' of which would satisfy me. 2. Secondly, reality, as contrasted with idea, is more particularly identified with sense-perception.

These two distinctions, of course, frequently coincide. Present reality generally manifests itself, in part at least, to our senses; and again the realisation of an idea in volition must be directly experienced by us. But the distinctions do not necessarily run on the same lines,[1] and for our present purpose it will be more convenient to keep them apart.

I proceed, then, to deal with the first distinction, *viz.*, the distinction between idea and *present* reality. The problem here involved is this: the past, as past, is no longer present; the future, as future, is not yet present. Yet, in so far as I am conscious of either, I am *now* conscious of it. And thus it would seem that past and future must be somehow present, if I am to be conscious of them at all. And we solve the problem by saying that past and future are present 'in idea,' but not 'in reality'. The idea, *i.e.* my thought of past or future, is present now to my consciousness; the past or future to which I refer and which I 'mean,' are not present now. Thus we get the seemingly paradoxical result that a present idea can mean a reality which is not present. And yet this reality cannot lie wholly beyond the reach of our present consciousness, or else we could not 'mean' it. Now, in the first place, we must observe that the word 'present' is here used in two senses. The first sense is purely temporal. The memory of a past event is the thought of an event of which I think as 'not-present'. The event is characterised for my thought by this temporal element which forms part of the very content of which I think. And the same applies *mutatis mutandis* to the future. It is purely a question of the temporal localisation of contents. It is part of the objective reference, the meaning of our ideas. In short, we must distinguish between the date of the object to which an idea refers, and the date of the idea itself regarded as an event

[1] *E.g.*, my present condition which in volition is opposed to an ideal modification of it, is by no means confined to what I apprehend of myself in present sense-perception.

in our mental history. We have here two entirely different sets of temporal distinctions, or rather temporal distinctions made from different points of view and dealing with different objects. In the one case we have the temporal localisation of the objective meaning of our ideas, in the other we have the temporal localisation of the idea itself in the succession of our conscious life. And here I would recall to the reader the conclusion of the first section. We found there that signs and meaning formed a whole, in which the weight of attention fell normally on the meaning, not on the sign. And hence we are conscious, as a rule, *only of any temporal determination that may belong to the meaning*, but we are not at all conscious of the fact that the meaning is present to us *now*. We think, *e.g.*, of the past as past, but we do not at the same time think of this thought of the past as being our present thought now. An event receives its date from its temporal relations to other events, but not from the fact that in dating it, it is the object of my present thought. This thought is itself dated as 'present' by means of the fact that as an event in my mind it has an aspect of immediate feltness, and not at all with reference to its meaning. And, even then, the explicit recognition of an idea as 'present' involves an act of reflexion, and it is, strictly speaking, always the idea which is *just past* which is called present, even as introspection would be more appropriately called 'retrospection,' because to make an object of one's own states of mind involves a new state of mind which is not itself an object, so that the object is always the state of mind which is just past. To sum up, then, we must distinguish between the time-determinations that are part of the meaning of an idea, and the time-determinations of the idea itself, *i.e.* of *my* consciousness of that meaning. There is a temporal element both on the objective and on the subjective side. The sign has its place in my mental life, just as the thing signified has its place in the whole scheme of meaning of which it is a part. And these two sets of temporal determinations are not confused, because we are never simultaneously conscious of them. When I am conscious of the past as past, or the future as future, I am not conscious of them as present, though my consciousness of them itself is a 'present' consciousness.[1] But it is 'present' only when it becomes itself the object

[1] It would be false to say, that in thinking of the past as past we are 'abstracting' from the fact that the thought of the past is a present thought. We can abstract only from something of which we are explicitly conscious, but as I have said, we are not conscious of the time of an idea when our attention is wholly fixed on the time of its meaning.

of a fresh act of reflexion, which in turn possesses no temporal determination, until yet another act of reflexion has again made an object of it. I do not think that I can make this point any clearer by labouring it further, and I will pass on to the second meaning of present.

This second meaning has nothing to do with time at all. Hence, in this case, when I say that something is before me in 'idea' and not in 'reality,' I do not mean that the reality is localised in a different moment of time from the idea. I am wholly indifferent to the question whether the reality belongs to the past or the future or, indeed, to any time at all. What I refer to is, on the contrary, a *qualitative difference* between two ways of experiencing the same content. The one way of experiencing gives me merely the idea, the other gives me the reality. Before attempting a general statement of this difference, I will try to make it clear by instances. A revived sensation differs from an actual sensation as idea from reality. Yet a colour as seen, and a colour as imaged, a tone as heard and a tone as revived, remain the same colour and the same tone. Indeed the example is particularly instructive in showing clearly that the difference in the two modes of experience is not a difference of objects. One can only say that it is a difference of *mode*, not a difference of content. It is a qualitative difference, but not a difference that affects the qualities of the objective content, but a difference in the quality of our experience of the content. The intensity, saturation, etc., of the imaged colour are the same as the intensity and saturation of the colour as perceived. The image of an electric light has greater brightness than the candle-flame which we actually see.[1] The revived tone of an organ is louder and more voluminous than the actual tinkle of a bell. As Prof. Stout expresses it, the actual colour and the actual tone 'strike the mind' in a different way from their images. To take another example, when we think of a horse, we mean the real living creature with all the qualities, etc., which we know it to possess, whatever the nature of the image or other mental sign may be by means of which we think of it. Yet, of course, thinking of the horse, and actually experiencing and dealing with the living creature, are for us two different things. And they differ, to put it quite roughly, in that the process of thinking, even whilst it is concerned with the object, can yet go on without the co-operation, as it were,

[1] *Cf.* on the difference between images and sensations Prof. Stout's chapter on 'Ideas and Images,' *Manual*, p. 393 *et seq.*

of the object, whereas the experience of an object as real involves the presence of the object as a contributory factor in the occurrence of the experience. At the same time, this difference is for certain purposes irrelevant and may be neglected. More particularly, this is the case where our attitude towards the object is purely theoretical. In theory, memory not only can, but often must, take the place of the immediate experience of the actual object; and it can do so because our ideas (whether in the shape of images or otherwise) are able to revive and redintegrate the objective content of the original experience, although the subjective character of this experience of the redintegrated content differs from the subjective character of the original experience.

Perhaps the best way of expressing this qualitative difference between two ways of apprehending the same content is to speak, as I did just now, of the difference as one between an original experience and the 'memory' of that experience. There is, surely, no objection to this manner of statement, provided we do not give too narrow a sense to memory. As I have used the word above, it is equivalent to *retentiveness in the widest sense;* in other words, I have not confined it to the recalling of particular events in all their particularity and with an explicit temporal qualification referring them to a definite place in the series of my *past* life or in the wider series of historical events. On the contrary, I have assumed that any kind of experience and any kind of objective content can be retained and recalled, and that a temporal qualification is found only in a relatively small number of cases. Any other view seems to me in open conflict with facts, and to make any account of the important part played by retentiveness in our intellectual life impossible. Whenever we 'think of' or 'about' something, and whenever we rely on acquired knowledge, we make use of memory, though we need not in recalling, say, a scientific theory, recall the occasion when it was first discovered or when we first learned it.

In this connexion, I can best explain why I said above that the difference was for certain purposes irrelevant. It is irrelevant for Logic, but not for Psychology. Or, as I might also express it, it is a difference which affects our practical rather than our theoretical interests. For the purposes of knowledge, if the problem, for instance, be some point about the nature of the horse, we can establish it either by actual observation on some particular 'real' horse, or we can 'think of' a horse. In both cases, of course, we take the individual instance as typical of its kind, and what we are interested in

is not some particular attribute characteristic of that horse only and of no other, but some universal property that shall be true of all horses. In other words, as we have all, I suppose, learned from such logicians as Mr. Bradley and Prof. Bosanquet, in aim and intention all scientific knowledge is knowledge of universal connexions of content, and from that point of view it makes no difference whether we find the material for our universal constructions in immediate or in retained experience, in direct apprehension or in memory. It would, perhaps, be more accurate to say, it makes no difference *in principle*. For in practice, of course, we have to consider (*a*) the trustworthiness of memory, and (*b*) the fact that the value of memory, even when trustworthy, depends largely on how *organised* it is. And this, in turn, depends primarily and mainly on the direction of our interest, which determined what we should attend to in the original experience or experiences now recalled. But the place of memory in cognition is too large a subject to be adequately treated here. At any rate, it is clear that without it we could have no universals, and this shows that it would be false to confine memory to the recalling of highly particularised experiences carrying with them a temporal qualification. On the contrary, highly generalised and abstract thought-contents, without any temporal determinations whatever, are retained, and without such retentiveness all more highly organised knowledge would plainly become impossible.[1] And whether, in a given case, we recall an object in all its particularity (as a 'this'), or for the sake of its universal nature (as typical of its kind), depends on the direction of our interest at the moment.

So much for the logical importance of the distinction between original experience and memory or retentiveness, which, as we have seen, is relatively small. But psychologically the distinction is of the utmost importance as necessitating a different principle of explanation. We can explain memory by speaking of traces left behind by the original experience, or of a disposition which under given conditions (association, etc.) leads to the 'revival' or 'ideal redintegration' of the original experience. On the other hand, for the explanation of the original experience we have to go in the last resort to

[1] It will be seen from this—and I emphasise it to prevent misunderstanding—that by speaking of retentiveness I do not mean *bare* repetition (if indeed such a thing exists) and that I do not deny intellectual constructiveness, but rather lay stress on the fact that without retentiveness such construction would be impossible and our mental life lack continuity.

the real object itself, the 'co-operation' of which,[1] as I put it above, is necessary to the production of the experience. This way of putting it may be metaphysically objectionable, but it is convenient, if not indispensable, for the purposes of psychology, besides being in accord with common-sense views. And I have at the beginning of this paper warned the philosophically-minded reader, who will be content with nothing short of Metaphysics, that I had no intention of giving him Metaphysics. And the point which I now wish to emphasise above all is this. Wherever the co-operation of the object is necessary to the production of an experience, we have an experience of the object *as real*. And whenever we have once experienced an object as real, it never after loses its 'Realitäts-character,'[2] even though all our subsequent experience of it should be through memory. In other words, we remember it as real, and in all further intellectual analysis of, or construction about it, even though we should have nothing but our memory to rely on, we think of the object as real and regard our theories about it as revealing to us its real nature. This then is the general principle. Whatever we have once experienced as real remains real for us in all our subsequent dealings with it. Thus we can explain the reality of the past as we remember it, and, further, the reality of that wider past with which History deals. And, again, this explains the derived reality of all results got by legitimate inference from data themselves characterised as real. When once I have experienced an object as real, I henceforth remember it, think of it, speak of it, etc., as real, even though that original experience should never be repeated. Every idea of the object is henceforth an idea of it as real.

I hardly know whether to say anything more on this subject, for to some I shall seem to have been labouring a truism, whilst others will think me guilty of something worse than paradox. Hence I can do nothing but repeat that the distinction which I have been trying to make accounts for one of the senses in which we oppose idea to present reality. Our state of mind in such cases is complex, containing, as a rule, some elements which we apprehend directly 'as real,' and others which by contrast are merely ideal. And when we speak of the former as 'present' reality, the adjective 'present' refers not to any temporal determination, but

[1] Psychologists call it the 'stimulus'.

[2] This, of course, is merely the general principle. I have omitted qualifications for the sake of simplicity. Any reader of the second section will be able to supply them for himself.

primarily to that 'Realitäts-character' of the experience which I explained as due to the co-operation of the object in the production of the experience. A temporal reference may indeed be intended besides the 'Realitäts-character' in all cases where, as in volition, the ideal element in our complex experience is characterised, not as real now though out of reach of my experience, but as capable of realisation in the future. This, however, is a special case, which I have space only to mention and not to explain.

After all that I have said there is little that I have to add on the second distinction between idea and reality, in which the latter is identified with sense-perception. It is clear that this distinction is but a special (though by far the most obvious and frequent) case of the distinction formulated in the last paragraph. For a large part of our 'ideal' experience is, of course, redintegration of an original sense-experience. But the contrast between idea and sense-perception brings out very clearly two points on which I have insisted in my account above. (1) It shows that the difference is not one that affects the object, but the subject's relation to the object. We say that the idea of an object is less real than the perception of the object, but we do not mean that the object itself loses any of its reality because of the change from perception to idea in our attitude towards it. Both perception and idea are 'of the object,' and whatever difference there is between them does not, we take it, affect the reality of the object. (2) Secondly, it shows that for the original experience, on which the idea is based, the co-operation of the object is necessary. For sense-perception normally, of course, rests on a physical relation between the real object and myself, or rather my body with its sense-organs. It clearly requires the 'external stimulus' proceeding from the object, whereas the memory-idea (taking the word in the widest sense) is stimulated from within. And again it is clear, as I mentioned above, that the distinction is important for practice rather than for theory. By which I do not mean that in theory we could get on without sense-perception, which would be obviously absurd, but that the results of observation, preserved either directly in memory or recorded in writing, etc., can take the place of direct perception for theoretical purposes. But practically it is otherwise. No memory-experience can take the place of the direct experience of the object. No recollection, however complete and vivid, of a sumptuous feast will allay the pangs of a hungry man. The idea of a horse will not serve a man to ride on, nor imaginary clothes to cover his naked-

ness. What he requires are those experiences which only the real object can give him, and for which no images and ideas can form a substitute. It is always in some kind of sense-experience that practical processes terminate. In theory, emancipated from directly practical interests,[1] that is not the case. Sense-perception is necessary as a starting-point and again for verification, but it is not the terminus and goal of the process. Knowledge, even as an ideal, is not the simultaneous presence of the whole universe in the form of sensation.

And now there is only one point on which I have to comment. Sense-perception is a term which bears an evil repute among many philosophers owing to the disputes which have raged about its relation to thought. These disputes were largely nourished by a confusion as to the meaning of idea. As I have used the word in the above discussion it means in the widest sense the revival, redintegration, reproduction of the content of an original experience. We have ideas where, and so far as, we have the working of retentiveness, and the difference between the idea and the original experience is, as I have emphatically pointed out, a difference in their *subjective* character as experiences. It is not, so far as meaning or objective reference are concerned, a difference of content. There are, of course, *also* objective differences, or differences of content. And of these differences of content the most important is the difference between the sensational element and the thought element in experience. Now unfortunately the term 'idea' has been used not merely to describe the retention and redintegration of *any* content, whatever its nature, but also to describe the special thought element in experience as distinct from the sensational element. It is impossible to gauge even approximately the amount of confusion which has arisen out of this double use of the word idea, as describing (*a*) a qualitative difference in the contents of experience, (*b*) a qualitative difference in the mode of experiencing a content, whatever its own qualitative nature might be. Now, if we choose to call the content 'red' or the content 'blue' sensational and the content 'colour' (as such) ideal, there is no objection provided we do not proceed to call the latter content less real because it is ideal, or the former more real because it is sensational. The distinction has nothing whatever to do with the reality of the contents. All contents, whether 'sensational' or 'ideal,'

[1] I do not, of course, mean to suggest that there is no interest or purpose or striving in theory at all.

can alike be redintegrated. But idea, in the sense of redintegration, is *not identical* with idea in the sense of 'ideal content'. I am inclined to think that most thinkers who opposed sense-experience and thought to each other, whilst identifying thought with idea, confused these two senses of idea. They were never clear whether they were opposing idea in the sense of revival to some kind of first-hand experience of the content as real (which might involve sensation, but might also be 'pure' thought), or whether they were opposing to each other different contents of experience. It is one thing to contrast the idea of a horse with the real horse, when the contrast is really between the revival of the original experience of the real horse and that experience itself. It is another thing to analyse that experience of the real horse itself and to distinguish in it those elements which are sensational from those which are ideal (thought-elements). It is this analysis which shows us that what we ordinarily call sense-experience is a highly complex thing, in which thought-elements far preponderate over the sensational ones, giving structure and form to the whole, without prejudice, in spite of their 'ideal' character, to the 'reality' of the object. In the further development of this process we get the 'real world' of Science with its 'ideal' laws. However, I need not go into details which all who are curious may find in Kant's *Critique of Pure Reason!*

D.

Finally, I will attempt in a few words to apply the results of the three previous sections to the 'realisation of an idea' which is a feature of volition. In the first place, the idea has objective reference or meaning. We are concerned not with an image or mental sign, but with a definite content of experience which we 'mean'. But, secondly, our consciousness of this content is in the nature of a revival; the realisation of the idea, therefore, demands the repetition of the original experience.[1] Thirdly, this repetition involves the co-operation of the real object. In some cases, the

[1] I am here speaking, for the sake of simplicity, only of those cases in which the end of volition is the repetition of some former experience, and I am neglecting the far more important cases in which our constructive intelligence has been at work, and the idea to be realised, therefore, goes beyond what we have met with in former experience. I must beg the reader to observe, that in these final remarks I am not trying to do more than give a rough, and necessarily inadequate sketch, of the way in which the general theory of the foregoing pages might be applied to volition.

willing individual himself is this real object, as, *e.g.*, where the idea to be realised is the idea of a movement to be executed by himself. In that case the idea passes at once into its appropriate reality, *i.e.* the kinæsthetic images pass into the corresponding kinæsthetic sensations. But behind this whole process of realisation lies as the condition of its possibility the real individual, regarded as a unity of body and soul, a psycho-physical organism. In other cases the realisation of the idea involves the co-operation of some of the other real objects amongst which the individual finds himself placed. And in that case, his judgment of the possibility of the realisation of his idea, and of the steps which he must take towards it, depends on his knowledge of the nature and behaviour of the objects concerned. And the realisation of the idea takes place not merely through his own efforts, but also through processes in the environment with which he has to deal.

I have used above the phrase 'the idea passes into its appropriate reality'. It remains to explain this a little further. It is often said, and said rightly, that we can will *only our own experiences*.[1] It would seem then that the reality of an idea must always be found within our own experience. This is true, but it must be rightly interpreted if it is not to give rise to serious misunderstanding. Quite generally, the statement merely means that the realisation of the idea must be experienced by me, if my volition is to

[1] I am aware that this statement is at variance with the doctrine which Mr. Bradley has laid down on this point in his admirable articles on Volition in recent numbers of MIND. *Cf.* especially MIND, N.S., No. 44. Mr. Bradley refers to testamentary dispositions as clear cases of volition not realised in the agent's own experience. I have no space here to defend my adherence to the more usual view. But I should say that no theory of volition can do justice to the facts without admitting that the process of realising an idea (1) need not be due exclusively to the agent's own activity; (2) and need not wholly fall within the agent's immediate experience. In other words, I see no reason to exclude inferences. Thus, *e.g.*, if my volition be to communicate some news to a friend by letter, the realisation of this idea, up to the dropping of the letter into a pillar-box, falls within my immediate experience, and takes place by my agency, whereas for the further realisation I have to trust another agency. Normally, I have no reason to doubt that even then my volition is being realised, although receipt of my friend's answer alone would be complete evidence of realisation. And any failure on his part to reply would naturally lead me to infer loss of letter and consequent non-realisation of my volition. Just as in this case I infer the realisation of my volition, I should say, that in Mr. Bradley's example of testamentary dispositions, the agent infers the realisation of his idea, and accepts that inference instead of the direct experience of realisation, from which by the nature of the case he is excluded.

terminate and to be satisfied. Should my idea be realised without my knowledge, I remain in a state of active conation and continue my efforts towards the realisation of my idea as if nothing had happened. My volition, then, must terminate in some definite experience of my own. But this experience need not be *in itself* that which I willed and desired. *It may be the end of my volition not for its own sake, but in so far as it is evidence to me of the realisation of my idea.* In other words, in the majority of volitions I am assured of the realisation of my idea only *through inference* from certain immediate experiences. An example will make this clear. When I will to make another person happy, my idea is realised by the occurrence of a certain experience in another person, and not, apparently, in myself. I do not will my own happiness, but that of the other person. Yet, even if I succeed in making that person happy, my volition does not terminate, unless I am also explicitly aware of my success. And in this sense I must experience the other person's happiness, if my idea is to be realised *for me*. The experience which assures me of the realisation of my idea may be no more than a smile or a word of thanks, but these are not in themselves the realisation of my idea, nor are they what I wanted to experience for their own sake; they satisfy me merely because they are signs of the other person's happiness, and, therefore, in experiencing them I experience the realisation of my idea. I have an experience of the *reality* of the other person's happiness, and though this experience is largely inferential in character, it is quite different from the mere idea of it which I had before.

This example illustrates at the same time how an idea may be realised in an 'ideal' content. But it may be as well in conclusion to give yet another example on the same point. When a man desires, *e.g.*, to realise his idea of goodness, and under the influence of this idea acts in an appropriate way, the act, taken barely as a psycho-physical process, is not a realisation of the idea of goodness at all. But, of course, the act is more than a psycho-physical process. The agent's total experience of his act includes as an element the recognition of the act as 'good,' *i.e.* as the realisation (so far as it goes) of an idea of goodness which inspired the act and determined its character. The act is real and is really good, and its goodness is an ideal (*i.e.* thought-) element in the total fact. The agent's idea is thus realised in an experience which itself contains ideal elements.

V.—THE CONCEPTION OF THE UNKNOWN IN ENGLISH PHILOSOPHY.

By T. M. Forsyth.

Along with the emphasis on experience as the starting-point of philosophy and the sole criterion of its conclusions, which is characteristic of the English development, has gone a recurrent reference to a region beyond our ken. The one conception is indeed the counterpart of the other. The principle that only what enters into or is implied in experience is available as a basis for any philosophic doctrine, usually signifies the restriction of knowledge within certain limits; the implication being that whatever lies beyond these limits is unknowable or at least unknown. This self-limitation of knowledge, like the experiential attitude itself, is connected with the practical trend of English thought. A characteristic note of the doctrine that knowledge is confined to certain aspects or portions of reality, has been the contention that the sphere which *is* accessible to knowledge comprises all that concerns the guidance of action or the conduct of life: what lies beyond is matter of speculation rather than of practical concern.[1] This is the general and practical basis of the doctrine, whatever be the particular theoretic argument advanced in support of it. But the precise theories of a known and an unknown sphere that are upheld by successive thinkers (and, connected therewith, their ideas of the relation between theory and practice) undergo development, just as do their precise conceptions of the nature of knowledge and experience. And these are implicated with each other. The development of the conception of experience is correlative with an advance of view as to what is beyond experience, or what it is that is unknown or unknowable. In the present paper, taking for granted the former,[2] I wish to outline the latter development and to show its connexion with the other.

[1] *Cf.* Locke, *Essay conc. Human Understanding*, i., 1, 5 and 6; ii., 23, 12.

[2] *Cf.* a previous article in Mind, vol. xiii., N.S., No. 51. The present paper was written not long after that.

The conception of experience that mainly dominates the philosophy of Locke and his immediate successors is that of a set of discrete data, in the connexion of which knowledge arises. Although their philosophy, both in its impulse and in its effect, is a progressive effort to get rid of the idea of explaining experience from what exists outside it, the view they take of the fundamental constitution of experience is nevertheless residual from such explanations. When knowledge or experience is taken as originating from the interaction of individual minds and a material world, which are supposed to exist independently of knowledge, the results of the contact on the experient consciousness—whether they are called 'sensations' or 'impressions' or 'ideas'—are naturally taken as isolated facts apprehended irrelatively to one another, and as forming both the source and the primary object-matter of knowledge. And when the question of the ultimate origin of ideas is abstracted from or dismissed as irrelevant, without their nature being reconsidered *de novo*, the supposition of them as essentially discrete objects of consciousness is left as a preconception controlling the inquiry from the outset. This is the view of experience that forms the basis of the traditional sensationist or empirical philosophy.

Thus far we have only a recapitulation of the character and kinship of this theory of ideas. But when we proceed to consider the working-out of the hypothesis, there appears as its inevitable counterpart or consequence the conception of something unknown and unknowable as a background and offset of what is known. The philosophy that begins from the antithesis of mental and material existence goes on the supposition that the mental facts which arise from their contact are representative of the material facts which condition the appearance of the mental; and the conscious states or ideas being considered more intimately and directly known than the ulterior objects imaged by or in them, the material existents come to wear a more or less inferential and problematic aspect. This affords the premisses for the sceptical conclusion. If mental facts are the only immediate objects of consciousness, what assurance have we that there are other real objects at all? What warrant is there for assuming any known existence whatever, other than the conscious states themselves?

When Locke initiates[1] the independent investigation of

[1] The same drift underlies Hobbes's work, and is not without its parallel in Locke's Continental predecessors. But the 'new philosophy,' as Berkeley calls it, attains distinct expression only in the later thinkers, as is evidenced by the markedly epistemological rather than ontological character of the philosophy of Locke and his successors.

experience and the nature of ideas, while at the same time the prior assumptions are not fully discarded, ideas still retain a representative and things an extraneous character. There is much ambiguity in Locke's account of the originals of knowledge. This is no doubt partly due to the transition he is effecting from the dogmatic to the critical standpoint. But the statements he makes and the conclusions he draws warrant our ascribing them in large measure to insufficient transcendence of the assumptions which his general methodological attitude is fitted to avoid. According to his explicit statements, ideas are representative of extraneous things that are apprehended only through their means; while they are themselves apprehended objects of knowledge. "Since the mind, in all its thoughts and reasonings, hath no other immediate object but its own ideas, which it alone does or can contemplate, it is evident that our knowledge is only conversant about them."[1] "It is evident the mind knows not things immediately, but only by the intervention of the ideas it has of them. Our knowledge therefore is real only so far as there is a conformity between our ideas and the reality of things."[2] Such assertions combine to suggest an antithesis of inner and outer—internal ideas and external things—that is not far removed from the separate-entity theory of pre-critical thought. In conjunction with this, moreover, goes Locke's mode of distinguishing primary and secondary qualities. Ideas, he says, are produced in the mind by the action of things or bodies existing outside it, and the ideas in the mind correspond to qualities or powers in the bodies. Further, some of the ideas resemble the qualities that produce them, others do not. Or to state the matter from the other side, in the one case there are qualities in the bodies which produce ideas like themselves in the mind, and so are patterns or archetypes of the ideas; whereas in the other case the qualities of the bodies are powers of the former qualities (or of the bodies in virtue of these) to produce in the mind ideas unlike themselves. These are the primary and the secondary qualities respectively: the former (figure, motion, etc.) existing as qualities in the bodies whether they are perceived or not, the latter (colour, sound, etc.) only as perceived by the mind and attributable to bodies only as powers of the primary. According to this mode of statement, then, ideas or mental facts are either copies of material qualities or representative of and correspondent to them without being their similitudes.

[1] *Essay*, iv., 1, 1. [2] *Ibid.*, iv., 4, 3.

Material facts are either primary, that is, qualities essential to or constitutive of bodies, or secondary, that is, dependent on the different modifications of the primary and incident to there being minds to be affected by them in certain ways.[1] Locke's philosophy wavers between accepting and rejecting this hypothesis. But although his own statements frequently indicate its inadequacy, he never thoroughly succeeds in surmounting it.

So far Locke's account imports that the constituents of matter and mind are qualities or characters and ideas correspondent to each other. But besides the clear and distinct ideas[2] corresponding each for each to material qualities, we have always, when they are united together in complex ideas, the confused or obscure idea of something in which they inhere or to which they belong. This idea of a something in which qualities subsist is our idea of 'substance'; which is that of a general substrate or support of particular coexistent qualities. But, Locke proceeds, we have no knowledge as to what such a substance is, other than the qualities we ascribe to it. It is "nothing but the supposed, but unknown, support of those qualities we find existing"—a something, we know not what, besides or beyond the qualities we know.[3] Further, we are as ignorant of the nature of a supposed spiritual or mental substance, as the substrate of ideas, as of the corporeal substance or matter. In either case all we know is the characters apprehended as pertaining to them; and although in each case we assume a support of these properties, we know not what it is beyond the properties themselves. Locke is careful to add however, that while, in default of a clear and distinct idea of them, we do not know the ultimate nature of such existents; still, from our not having this knowledge we cannot conclude against the reality of either, and are rather assured of the reality of both.[4] The significance of this doctrine is twofold. In the first place, it reinforces the antithesis of mental and material substance and the representative theory of knowledge, while yet suggesting their transcendence by insisting that the ideas of secondary qualities at any rate are not copies of external facts; but are original (albeit originated) appearances in the mind, conformable to 'things' only as being the natural and necessary outcome of their contact

[1] *Essay*, ii., 8, 7 ff.
[2] *Ibid.*, ii., 2, 1. "There is nothing can be plainer to a man than the clear and distinct perception he has of those simple ideas."
[3] *Ibid.*, ii., 23, 1-4. [4] *Ibid.*, §§ 5 and 15.

with 'minds'.[1] But secondly, the conception that mental and material substance are alike unknown in their ultimate natures implies an opposition to the view of mind and mental facts as certain or categorical in any respect in which matter and material facts are only inferential and hypothetic; which suggests the doctrine that the mental and the material are correlative or correspondent characters exhibiting the nature of one otherwise unknown reality, which is conceived only as conditioning the knowledge these characters convey.

It is more especially with respect to the former point that Berkeley interprets Locke. He denies the validity of the distinction between the ideas of primary and secondary qualities as respectively resembling and not resembling external things. If the secondary qualities as actually apprehended are mental, so also are the primary, since the two sorts are interdependent and inseparable. "Where the other sensible qualities are, there must these be also, to wit, in the mind and nowhere else."[2] Proof is wholly wanting that any ideas are copies of things or that an idea can be like anything but an idea. And if this is so, the conception of a material substrate of sensible qualities becomes both unnecessary and unintelligible; for the sensible qualities themselves, as they are actually experienced by us, are the only material existents we can ever know, and our experience is quite the same with or without a supposed material substance underlying them.[3] Berkeley's philosophy is thus primarily directed against the supposition of independent material things as archetypes of ideas and ideas as ectypes of material things. But the trend of his thought is not at all towards denial or doubt of a knowledge of reality: on the contrary, the key to its whole motive and sequence is contained in the removal of the possibility, which he sees that the supposition in question involves, that all our knowledge is only appearance and never reaches the reality supposed to be known.[4] Accordingly, in opposition to the doctrine of the representative character of ideas he insists that the ideas or sensible qualities are themselves real. Among his earlier jottings he had written: "Ideas of sense are the real things or archetypes. Ideas of imagination,

[1] *Cf.* iv., 4, 4.

[2] *Principles of Human Knowledge*, § 10; *cf.* 73 and 99; *Dialogues between Hylas and Philonous* (*Works*, ed. Fraser, 1901, vol. i.), pp. 397-405.

[3] *Principles*, §§ 16-24; *Dialogues*, pp. 408-411. [4] *Cf.* §§ 86-88.

dreams, etc., are copies, images of these."[1] And in the *Principles*[2] he says: "The ideas imprinted on the senses . . . are called *real things:* and those excited in the imagination . . . are more properly termed *ideas* or *images of things*, which they copy and represent". But the involuntary and unalterable nature of the ideas of sense requires some hypothesis to account for their origin, and to explain the distinction between them and the ideas of imagination. Berkeley finds this in the conception that although our ideas have no archetypes in any material existent, their archetypes exist 'in some other mind,' namely, universal mind. The occurrence and order of ideas are independent of the finite individual mind; but in universal or infinite mind are to be found both the originals of ideas and the originating power which Locke erroneously ascribed to matter.[3]

The point of Berkeley's philosophy then is—and this is his own statement of its purport[4]—that by exposing the nonentity of an abstract material substrate of perceptible qualities, and substituting for it all-comprehensive mind, it serves to counteract the sceptical tendency apparently involved in Locke's position. For if the principle or agency to which we refer the substantiality of 'things' and the production of 'ideas' is spiritual and not material, there seems no difficulty in holding that ideas are truly real, and so uniting (as is Berkeley's design[5]) the convictions of common-sense and reflexion—that 'those things we immediately perceive are the real things' and that 'the things immediately perceived are ideas, which exist only in the mind'. But while Berkeley's philosophy tends to break down the opposition between experience and reality, by assimilating ideas and things, it fails to provide an account of the distinction between ideas as existing *within* and *beyond* the individual mind. Moreover it accepts without criticism the distinction between mind and its ideas, and the conception that their relation involves primarily that the ideas are the objects of the mind. Consequently, when Hume proceeds to apply to mental substance the same reasoning as Berkeley had applied to material, we are left with the equation, idea = object or existent, without either things or minds as anywise distinct from the ideas themselves. Hume's criticism, founding (like the doctrines of Locke and Berkeley) on 'particular perceptions' or ideas which are quite 'distinct' from one another, maintains the

[1] *Commonplace Book* (*Works*, vol. i.), p. 52. [2] § 33.
[3] *Principles*, §§ 29 and 90; *Dialogues*, pp. 451-458.
[4] *E.g.* in the passages just referred to. [5] *Cf.* p. 484.

invalidity alike of any material 'existence distinct from the mind and perception' and of mind conceived as 'distinct from the particular perceptions'.[1] On this view, if there exists anything else besides ideas it is at all events unknown and unknowable. Hence Hume's position is the direct sequel of that other interpretation or aspect of Locke's theory, which was indicated a few paragraphs back, that what is really implied in the conception of a 'somewhat' beyond the actual contents of experience is that these contents are conditioned by some otherwise unknown reality. For what alone is definitely expressed in positing, beyond perceptible qualities, an unknown substrate 'wherein they do subsist and from which they do result,' is on the one hand that the known is bounded by the unknown, and on the other that in the unknown lies somehow the cause or the explanation of the known. And when the implications of the assumed irrelative character of ideas are, in Hume's hands, worked out to a logical conclusion, whatever is *without* experience is dismissed as unknowable; the 'ultimate cause' of ideas being 'perfectly inexplicable' and its nature for ever indeterminable by human reason.[2]

The intuitional or 'common sense' philosophy of Reid and Hamilton, which follows as a reaction against the Lockian development, is, as I stated in my former article, an attempt to establish the validity of knowledge by maintaining its intrinsically objective character in opposition to the subjectivity of the sensationist doctrines. But although Reid is emphatic in his denial that subjective ideas are known with a certainty that does not extend to objective things, and Hamilton equally so in his assertion that consciousness or experience testifies to the reality of existence beyond itself; they uphold the objectivity of knowledge, only at the expense of reinstating the antithesis of individual mind and material world as factors in its production. The principles of relation, which are taken as securing the objectivity of knowledge, are referred to another source than the terms they combine; mental and material existence being conceived as conjoint originators of knowledge. That escape is impossible, on this hypothesis, from the sceptical issue which their philosophy seeks to avoid, becomes apparent when Hamilton proceeds to distinguish between the characters ascribed to these existents and their actual being. Reid's rehabilitation of the distinction between primary and secondary qualities differs

[1] *Treatise of Human Nature*, i., 2, 6; 4, 2 and 5.

[2] *Treatise*, i., 3, 5 (ed. Green and Grose), p. 385; (ed. Selby-Bigge), p. 84.

from the mode of statement which Locke countenances, primarily in his insistence (following Berkeley) that there is no warrant for holding that any mental fact only represents or copies a material fact. Mental states and material qualities, he says, 'are not of kin to' each other, 'nor resemble' each other 'in any one feature'.[1] But while this position is valid as against the theory of representative perception, it implies either an immediate knowledge of the material world, which is inconsistent with the alleged disparateness of matter and mind; or that the material world is known only as a 'suggestion' of mental states. In point of fact Reid emphasises these alternatives in his *Essays* and *Inquiry* respectively.[2] But in neither case does he transcend the conception of duplicate existence—sensations and qualities or mental and material facts correspondent to each other,—even while he denies that the relation between them is that of resemblance or simple repetition. Moreover, his doctrine of perception, taken in conjunction with his statement of the difference between primary and secondary qualities—that in the case of the former we know equally well both the quality and our perception of it, whereas we know the latter qualities only as powers in bodies occasioning the perceptions,[3]—points in the direction of Hamilton's view. For if certain qualities of matter are unknown in themselves and known only as relative to our perception, the question again arises whether any qualities at all are known absolutely and immediately; or wherein consists the warrant of immediate knowledge.

Hamilton maintains that the secondary qualities, so far as they are known, are solely mental or subjective facts; while the known primary qualities or material and objective facts are apprehended directly in so far as they are in immediate contact with the sense organs, and indirectly or inferentially in so far as they are not 'now and here' present.[4] In other words, his criterion of immediate knowledge is presence in consciousness as a mode of mind or proximity to the organism as a mode of matter. He asserts accordingly *both* that material existence is in general less directly and certainly known than mental existence *and* that we have an immediate

[1] *Works* (ed. Hamilton), i., 128.

[2] *Inquiry into the Human Mind*, p. 123 ff.; *Essays on the Intellectual Powers*, p. 258 ff.

[3] *Ibid.*, i., 313 ff.

[4] *Lectures on Metaphysics*, vol. ii., lects. 24 and 27; *Dissertations* (Reid's *Works*, vol. ii.), B and D. Hamilton's conception of intermediate or secundo-primary qualities does not alter his main position. The point at issue is further discussed by Ferrier, *Institutes of Metaphysic*, sect. i., prop. 5; and J. Grote, *Exploratio Philosophica*, i., 101-102, 253-254.

knowledge of the material world. But the two positions are mutually contradictory. To get a consistent statement they require alike to be replaced by the conception that all knowledge, whether of mental or material facts, has both an immediate and a mediate aspect—a conception which Hamilton never reaches. In the end he is driven, by the force of his own logic, to put the two existents quite on a par; but it is only to deny a competent knowledge of either. For he holds that, whether the attributes of mind and of matter—the characters we attribute to these two realities—are known directly or through the intervention of some form of representational consciousness, in neither case have we a warrant for maintaining that the substantial or actual nature of their existence is thereby apprehended. His conclusion is: "Mind and matter, as known and knowable, are only two different series of phenomena or qualities; mind and matter, as unknown and unknowable, are the two substances in which these two different series of phenomena or qualities are supposed to inhere. The existence of an unknown substance is only an inference we are compelled to make from the existence of known phenomena; and the distinction of two substances is only inferred from the seeming incompatibility of the two series of phenomena to coinhere in one." [1]

The outcome of this phase of doctrine is accordingly as sceptical as that which preceded it. If we accept as the data of knowledge certain definite and indisputable facts, then whether we treat these facts as so many isolated items of knowledge (as the sensationist philosophy does) or regard knowledge as requiring the supplementation of these by another order of indisputable facts (as in the intuitionist doctrine); in either case aught else turns out to be unknowable, or to be knowable only in respect of its existence but not of its nature. Or to vary the statement: Whether we regard matter and mind as being apprehended only in or as discrete characters occurring in consciousness or as existents preconditioning consciousness, on either view an impassable chasm appears between the facts as they are apprehended in knowledge and anything else beyond them. If we refuse, with Hume, to assume the disparity of the mental and the material, we get *one* unknowable reality; if we accept it, as Hamilton does, we get *two*. But in the one case as in the other the source of the theory of unknowability is the conception that ideas themselves lack referential or connective

[1] *Lectures on Metaphysics*, i., 138; *cf. Discussions*, pp. 639-640.

character: they are supposed to be neither continuous with one another nor with the reality they apprehend. We can avoid this result only by recognising that ideas are not irrelative, but thoroughly relative—relative both to one another and to what is beyond though continuous with them.

The resuscitation of the purely empirical standpoint in the doctrines of Brown and Mill is chiefly noteworthy, in the present reference, for the additional evidence it affords of inability to give a satisfactory account of knowledge on the same general presuppositional basis. Brown, like Hume, avoids the preconception of a distinction between mental and material or inner and outer facts. But he leaves us with modes of mind as the only known facts; while matter is inferred as conditioning their occurrence, and although so far known as regards its existence, it is unknown in its nature. Mill upholds Berkeley's hypothesis of the sufficiency of mind and explains matter as erroneously suggested by inseparable association of mental states. But he avers that our conscious states themselves disclose 'a final inexplicability'. Both theories, therefore, renounce the doctrine of representative knowledge—that there are material and mental facts correspondent to each other. Yet neither gets rid of the unknowable. Brown finds it in matter, Mill in mind. And the grounds on which Mill posits an inscrutable reality underlying the phenomena of consciousness are precisely such as disclose the initial error from which the doctrine springs. Having applied the associational view of knowledge in order to explain the conception of an external material world, and found the rationale of this conception in the fact that our experience at any instant not only consists of definite impressions or ideas actually present, but also contains a reference to an indefinite background of associated ideas regarded as supplying the conditions of our actual or present consciousness, Mill proceeds to inquire whether such an explanation is applicable likewise in the case of the other alleged reality beyond the occurrences of consciousness—the internal or mental existent. He concludes in the negative. The conception of mind as well as of matter is, he says, that of a 'something' contrasted with its manifestations or definitely known character. But the phenomena of memory and expectation—of experience of a past or a future in, and as continuous with, the present—forbid us to account for the whole of our consciousness by its actual content together with a reference to an indefinite background of allied content. For these phenomena are

unintelligible except on the hypothesis either that a succession of consciousnesses can be aware of themselves as a succession or that the mind is something quite different from a succession of consciousnesses. Since, Mill concludes, we can comprehend neither of these alternatives we must acknowledge this truth—that what is past or future can yet be apprehended in the present—as an inexplicable fact to which no theory is adequate.[1] Or as he expresses his conclusion in another passage, we are compelled to acknowledge in mind a reality which is known to itself phenomenally as a series of consciousnesses, but is in its real nature unknowable.[2]

Now one need not be prepared to maintain either that Mill's theory of matter is adequate or that it could under any circumstances be made adequate to the phenomena of mind. On the contrary, the outcome which the theory has indicates its inadequacy. But what concerns us here is that it is the assumption of the essential disconnexion of conscious states, or the absence from them of all inherent referential character, that leads Mill to assert the inexplicability of the actual phenomena of consciousness, and conjointly, the existence of an unknowable reality underlying them. In other words, the preponderance given to the discreteness over the continuity of mental states, which had ruled the Lockian development, is here once more carried to a consistent issue. The Berkeleian strain in Mill's thought causes the stress to fall on *mind* as the unknowable existent which is taken to be implied in experience. But in his case as in Hume's it is the implications of the continuity of experience, reacting on the presupposition of its discontinuity, that give the general result which is the self-refutation of their philosophy. And as we have found in Hamilton's theory, the counterview which reasserts the continuity of consciousness, but seeks its relations in a source that transcends its terms, fails in the end to avoid the same general conclusion.

But further, Hamilton's philosophy presents an additional phase of doctrine that makes evident the final concurrence in outcome of his mode of thought and that which he opposes. This further phase follows from the other so soon as the 'incompatibility' of mental and material existence is taken as not excluding their union in a common and more ultimate source or ground. However disparate mind and matter are, they are relative to each other, and this fact signifies the con-

[1] *Examinations of Hamilton's Philosophy*, pp. 247-248.
[2] *Ibid.*, p. 263.

nexion as well as the distinction of the two. Hamilton maintains accordingly that not only are the qualities of mind and matter respectively relative to a substance which transcends these qualities, but they are known only in correlation to each other. All qualities, both of mind and of matter, are thus known only as relative to or conditioned by one another. In general, each fact known is known only as limited or conditioned by other facts known together with it. Hence knowledge is only of the conditioned: the unconditioned is unknown and unknowable. But what is conditioned implies the unconditioned as its complement or ground;—implies its *existence* (according to Hamilton), although it is *known* only as the negative of the relative and conditioned. We can know existence only as conditioned, but we cannot avoid at the same time positing unconditioned existence, albeit unknowable or known only negatively as complementary to the conditioned.[1] The essential purport of such a doctrine as this is that whatever is known, is known only as relative to something else; each item of knowledge being in the end relative to all other items, and all of them alike relative to the unknown. But as Hamilton holds it the doctrine is both inconsistent in itself and at variance with the other principles of his philosophy. For, in the first place, a merely negative conception is a psychological impossibility: it must have some positive features, however contrary they are to the conception to which it is opposed. To be conceived as existing at all, therefore, anything must be positively and not simply negatively conceived; to be known as existing it must be positively, however meagrely, known.[2] But again, and apart from this, the principle that knowledge is only of 'the relative as variously related' is contradictory both of an abstract opposition between relations and terms, and the supposition of determinate existents as prior conditions of knowledge. For it is implied in the relativity of knowledge that known existence

[1] *Dissertations*, pp. 935, 965; *Discussions*, pp. 12-14.

[2] I cannot here discuss the reintroduction (by Hamilton, especially *Discussions*, p. 15; and Mansel, *Limits of Religious Thought*, lects. iv., v.) in the form of belief of what is excluded from the sphere of knowledge. It bears, of course, on the practical aspect of the question and raises the problem of the relation between theory and practice. This much at least may be said, that no theory is satisfactory which simply leaves these two contrasted with each other, and that from the theoretical point of view the distinction between belief and knowledge can only refer to the less and the more definitely known. *Cf.* below. A recent statement in line with Hamilton's and Mansel's doctrine is that of S. H. Hodgson, *Metaphysic of Experience*, iv., 204 ff.

is phenomenal to consciousness and therefore cannot account for its origin.

With respect to the former of these points Hamilton's position gets corrected in Spencer's philosophy. "The unconditioned," Spencer says, "must be represented as positive and not negative." Every proof of the relativity of knowledge postulates the existence of something beyond the relative; and as all existence is, as such, positive, all consciousness is a positive consciousness of existence. What is conceived or known as existing beyond knowledge cannot, therefore, be thought of as *only* negative of the knowable: if it eludes distinct consciousness, it is at the very least something more and other than the limited or conditioned; something, therefore, of which we have 'a positive though vague consciousness'. In other words, the very character of knowledge which involves that all that is definitely known is relative and conditioned, involves likewise the indefinite consciousness of that which transcends definite knowledge. For the definite is such only by virtue of arising out of the indefinite, which persists throughout the variations of definite thought: all definition implies something which is defined—something which, while still undefined, is real. Spencer concludes accordingly: "Our consciousness of the unconditioned being literally the unconditioned consciousness, or raw material of thought to which in thinking we give definite forms, it follows that an ever-present sense of real existence is the very basis of our intelligence. As we can in successive mental acts get rid of all particular conditions and replace them by others, but cannot get rid of that undifferentiated substance of consciousness which is conditioned anew in every thought; there ever remains with us a sense of that which exists persistently and independently of conditions."[1]

But if this is so, Spencer's characteristic doctrine that the 'actuality lying behind appearances' is unknowable, cannot be upheld. Not only have we, as he maintains, an indefinite consciousness of reality as the ground and warrant of whatever is definitely known; but reality is precisely that which our knowledge progressively defines. Spencer regards the conception that we have an indefinite consciousness of reality besides the definite consciousness which constitutes knowledge or appearances, as the only safeguard against a sceptical issue. But his own view only converts the sceptical into an agnostic attitude. For our 'indefinite consciousness

[1] *First Principles*, § 26.

of the unconditioned' does not, in his view, preclude reality from being 'for ever unknowable'. But this is self-contradictory. 'Unconditioned existence' is indeed unknowable. But this does not mean that we have to posit once for all an unknowable existent 'beyond conditioned existence' and then confine ourselves to the appearances which are inconsistently said to 'manifest' this reality. It means that existence so far forth as unconditioned—that is, not characterised by being brought into relation with already known existence—is assuredly unknown, but not therefore incapable of becoming known. The distinct articulation of this principle belongs, however, to a mode of philosophy to which Spencer's statements are inadequate. For the proof that existence is intrinsically knowable lies in the truth that 'existence' is *for* knowledge just what is actually or potentially known. Unless any existent is either known or continuous with the known it cannot be anything for knowledge at all, that is, cannot exist even in thought and hence cannot be thought as unknowable. The defect, then, of the Spencerian doctrine lies not in the relativity of knowledge but in not making the relativity thorough enough. Hamilton and Spencer propound relativism in opposition to absolutism. But their doctrine is itself absolutism in the sense of maintaining existence irrelative to knowledge. That anything exists but cannot be known, even if we add that it must be thought, involves that existence is not as such relative to knowledge—that knowledge and existence are not essentially relative to each other.

The argument against the conception of unknowable existence is, in the English development of philosophy, first formulated by Ferrier; and a basis laid for the overthrow of the doctrine of nescience. The true remedy against undue declarations of ignorance is, Ferrier says, to institute an independent inquiry into what the nature of knowledge (and by implication, of ignorance) really is. When we do so, we find that unknowable existence is a nonentity which is only a phantom of the true reality we know. Whatever are the deficiencies of Ferrier's philosophy,[1] his position here is in essentials impregnable. What his principle involves is that knowledge cannot be *only* phenomenal and relative, since we cannot know anything *as phenomenal* without implying what is not phenomenal, and this means that there is a non-phenomenal significance *in knowledge.*[2] And further, we

[1] Some of these were indicated in my former paper.
[2] *Institutes of Metaphysic*, § 1, prop. 14, 18, 20.

cannot posit, either as determinately known or as inherently unknowable, any existent irrelative to knowledge; for we can only know what existence is by asking what it is for knowledge, and it is the differentiation of features in knowledge that is our sole basis for distinctions in reality.[1] Real existence, then, cannot be unknowable; on the contrary it is precisely what is knowable. For knowledge the only unknowable is the unintelligible or contradictory; and to suppose that real existence is unintelligible or contradictory is to belie the nature of knowledge. Further, ignorance being simply want or deficiency of knowledge, there can be no ignorance of what it is not possible to know. "There can be an ignorance only of that of which there can be a knowledge." In other words, the sphere of knowledge and that of ignorance are coincident; the knowable is also the only 'ignorable'. Reality, therefore, or any character of reality, may be either known or unknown—what we know or what we are ignorant of,—but it cannot be incompatible with the nature of knowledge; and the circumstance that knowledge cannot extend to what is incompatible with its nature—that is, the self-contradictory—is not a defect of knowledge but its strength, that which makes it knowledge and therefore knowledge of reality.[2]

This conclusion has been enforced and amplified by more recent thinkers. There is substantial agreement among recent writers that the alleged eclipse of knowledge by the shadow of unknowable reality is fallacious and self-inconsistent. Present-day controversy concerns the specific nature and the relative extent of our knowledge rather than its general validity. The centre of interest has shifted from the question how far our knowledge is real to the question how much we really know.[3] Is not our actual knowledge of reality infinitesimal when compared with the reality that is unknown or at best apprehended only in uncertain outline or by vague surmise? Or to put it otherwise: Is not the definite or certified knowledge we have yet attained only taken as valuable at all because it is supplemented by vague guesses which have a practical significance but lack theoretic confirmation? And must we not find in such inchoate apprehension the *suggestion* towards more adequate knowledge, and in this in turn the *amendment* of our conjectural

[1] *Institutes of Metaphysic*, introd., §§ 54-60.
[2] *Ibid.*, § 2, prop. 1-3; § 3, prop. 1-5.
[3] This aspect of the matter was distinctly expressed by Hamilton (*Discussions*, pp. 629-630). *Cf.* Prof. Pringle-Pattison's *Scottish Philosophy*, p. 206 ff.

beliefs ? There are the questions underlying present discussions. But in order to get a clear issue we require to keep the past development of philosophy before us ; for our present topics are simply the forms into which the historic problems have been thrown for us by the discussions of our predecessors.

To summarise and conclude the foregoing outline : The conception that experience consists fundamentally of definite items of consciousness that are apprehended irrelatively to one another, and that knowledge arises by way of extrinsic connexion of these data, or fails to be knowledge if they cannot get connected, leads to the conclusion that we have no guarantee of the ultimate validity of our knowledge. And the counter-conception, that the desiderated relations are supplied by principles of another order than the data themselves, has a similar result. The source of both theories is the supposition that mind and matter exist, as they are known, independently of the knowledge of them, and that in these known existents are to be found the preconditions and the explanation of experience. But the outcome of this view is, that since we know matter and mind only in so far as they are characterised in knowledge, what they may be apart from knowledge we do not and cannot know ; and as they are already posited as existents prior to knowledge, they seem to be unknowable in their real nature and known only in respect of certain characters which enter into knowledge. When it is recognised that the two existents are known only relatively to each other and must have a common ground of relation, there still seems to be unknowable existence although it transcends the nature alike of matter and of mind. The only means of escape from this conclusion is the recognition that mind and matter or subjective and objective existence [1] are, as they are known, realities only *within* experience. The presupposition both of the sensationist and intuitionist philosophy is that subject and object exist outside experience and condition it, or if they do not so exist, knowledge is restricted to certain conditional appearances and cannot reach the conditioning reality itself. In the one case experience is taken as the product of known subjective and objective factors ; in the other as having an unknown source beyond known existence. But in either case ultimate reality, or reality as it truly is, seems unknowable. In Spencer's doctrine, which may be taken as com-

[1] One may take these antitheses as in the main coincident, without discussing their relation or their precise significance.

bining sensationist and intuitionist strains, known existence both subjective and objective is taken as belonging to appearance and not reality, while the distinction between them is accepted without inquiry into its source in experience. It is only when we are through with the start from experience that the subjective and the objective are seen to be, as known existents, features within our experience and yet a valid characterisation of reality. For while subject and object are indeed known only relatively to each other, they express in their varying and advancing correlation precisely the degree in which reality is known.

What alone is meant, then, by anything's existing apart from or independently of the knowledge of it, is that what we know always implies more to be known or that what we know is not fully known. But the very terms of its assertion signify that it is knowable. All our experience implies a beyond—an unknown correlative to the known; but in order to be anything for experience at all the beyond must be continuous with experience. And this involves that much that is not definitely characterised may be known indefinitely in anticipation of more definite knowledge;—that the unknown reality is not wholly unknown, and that it is what as knowledge advances becomes progressively known; for knowledge becomes definite only by defining what is indefinite though none the less real. In fine, knowledge and existence, though not coincident, are of a piece with each other. However far, then, unknown reality may transcend our specifically human experience, this experience is itself intimately linked with the reality beyond, and has its whole significance in being a progressive apprehension of and participation in *real* existence.

VI.—CRITICAL NOTICES.

Greek Theories of Elementary Cognition from Alcmæon to Aristotle. By John I. Beare, M.A. Oxford: Clarendon Press, 1906. Pp. vii., 354.

Mr. Beare has given his work a title which, if not directly suggestive of the precise nature of the various topics dealt with, at least defines accurately the limits of his inquiry. It is a detailed critical presentation of the doctrines propounded by Greek thinkers up to the time of Aristotle about such subjects as sense-perception, memory, and imagination, in short about all those psychical processes which, though they have a cognitive function, are yet regarded as being more elementary than *thinking*. An English treatise of this description has long been needed, for, while many writers in this country have dealt with the general metaphysical development up to Aristotle, they have as a rule treated only incidentally of psychological topics. It is true that, for the early philosophers, psychology was not a separate science. Nevertheless it is important to have the various psychological theories dispersed through the fragments of their writings brought together and compared with each other, and the special psychological development pointed out. It has been all the more practicable to do this because, in the case of the earliest Greek thinkers, as Mr. Beare says, "the effect of their metaphysics upon their psychology is by no means so great as might be supposed. The extreme generality of their philosophic views in nearly all cases rendered it impossible, or at least difficult, for them to effect a real junction between these and the particular phenomena of mind. . . . Even those whose principles differed most widely may be found giving similar explanations of the elementary phenomena of perception." It is not clear whether our author intends to include Aristotle among those to whom these remarks apply. It is certain that it is just by Aristotle that the most resolute attempt is made to coordinate psychology and physics as a whole in one general philosophic scheme. At any rate Mr. Beare has found it necessary in his case to make an exception to the general rule and enter into a discussion of the metaphysical doctrines of ὕλη and εἶδος, δύναμις and ἐνέργεια. In the case, however, of previous philosophers no special account of their cosmology (except briefly in the case of

Plato) is given and only such metaphysical principles are quoted as they brought forward to explain particular psychical facts.

No one who reads this volume will fail to realise the fruitfulness of this method of handling the subject, or the gain that results from the separate treatment of the psychology of at least the earlier writers freed from all ontological discussion. Not only, however, is this work absolutely alone in its field in English, but it is safe to say that there is nothing of its kind, nothing at once so specially directed, so comprehensive, and so thorough in any language. In German we have only the usual monographs on special passages, subjects or authors, or on the other hand the great histories of philosophy which suffer from the defects noted in the case of our own. But, further, this volume is of first-rate importance, not only for those who take an antiquarian interest in Greek thought, but also for the metaphysician of to-day. It presents the growth of psychological theories which, in one form or another, satisfied the mind of man for close on 2,000 years. These doctrines point to certain fundamental presuppositions which it will be of interest to the metaphysician to compare with the hypotheses by means of which he hopes to explain the new and disturbing phenomena with which modern investigation presents him.

Mr. Beare's method of procedure is to take first of all the 'five' senses separately, beginning with vision and noting the advance in theory in each case from Alcmæon onwards. He then brings together all that was said about sensation in general by the writers discussed, and concludes with an account of what Aristotle called the κοινὴ αἴσθησις, *i.e.* the faculty of synthesis involved in sense-perception. In this last section the bulk of the material discussed is drawn from Plato and Aristotle, for the earlier writers, besides failing to treat the synthetic faculty separately, hardly even noticed the aspect of synthesis in sense-perception, and in general their treatment of memory, dreaming, and imagination, functions referred by Aristotle to the central sense, is almost equally meagre.

After studying this work it is almost impossible to decide whether its most impressive feature is the completeness and accuracy of Mr. Beare's acquaintance with the sources from which he draws his critical insight, or the reality and imaginative freshness of the way in which he sets the subject before us. But while in the matter of erudition there is the vastness and finality that elicits admiration for one who has a unique knowledge of his subject, perhaps the more individual trait is the constructive imagination which fits together into a coherent whole the scattered and dark sayings of the earliest psychologists and makes their doctrines live once more in our intelligence. The misty tradition once surrounding the Presocratics is dissipated; the sceptical bewilderment at first produced by deeper study passes away, and we are left with a clear and authentic account of a line of thinkers whose intellectual environment seems as strange to us as the social institutions of the period of some forgotten patriarchal dynasty.

There are, however, some occasions on which Mr. Beare's virtue of vivid presentation seems to require a little tempering. I should instance such a passage as his rendering (p. 86) of Aristotle's *De Sensu*, 2438 *b* 14 *sqq.* The Greek stands—ἔδοξε γενέσθοι σκότος ὥσπερ λύχνου ἀποσβεσθέντος—which hardly seems to warrant one in talking of "a brilliant illumination followed by immediate darkness". At this place Aristotle is alluding to the necessity for continuity between the eye and the external transparent medium, if vision is to be possible. He says that when the connexion is severed vision promptly ceases, *just as when a lamp is put out.* This seems to be the only point.

Again, in *De Memoria*, 1449 *b* 12, it is hardly safe to say (p. 308) that Aristotle distinguishes a possible ἐπιστήμη ἐλπιστική from ἡ μαντική. He simply states the abstract possibility of a science dealing with future events, without mentioning whether actual conditions allow of any real example of it being found.

But these are small points. An objection of a somewhat different kind could be taken to the translation (p. 312) of ἕξις in 451 *a* 15 as relationship. Though, as Aristotle points out in 1022 *b* 10, a ἕξις may be relative, yet it is not a relationship; μνήμη is the character or disposition in virtue of which a φάντασμα is related to an object of past experience. Mr. Beare does well to object to Zeller's rendering of ἕξις as 'possession' in this case and in 449 *b* 24. The question is as to whether possession is at any time the proper translation.

In his treatment of the materials from which we reconstruct the early theories of vision Mr. Beare is particularly illuminating (*e.g.*, p. 16 and note). It is noteworthy that he does not tend to separate the doctrine of Empedocles from that found in the *Timæus* so far as Mr. Archer-Hind does. The intricacies of the Aristotelian conception are well explained, but it is very questionable whether Aristotle can be said to have regarded light as even possibly an ἀλλοίωσις. The evidence in 446 *a* 20 *sqq.* seems to be against this. When we come to the chapters on Sensation in general and the Sensus Communis, we are in the midst of metaphysical questions of the highest importance. The extent to which Plato anticipated Aristotle in pointing out the existence of a central psychic function dominating the special senses is brought into just prominence, and the difficulties attendant on any attempt to make a consistent theory out of the statements of either of the two philosophers are fully presented.

To turn to details first, it is to be noticed that Mr. Beare reverts to a somewhat outworn fashion in writing 'consciousness' where self-consciousness is plainly meant (pp. 289-290). This is surely a case in which purism is misleading. Again, I cannot think he is happy in his explanation of *De Mem.*, 453 *a* 10, where the process of recollection is compared to συλλογισμός. The 'syllogism' is nothing preceding the search for the thing to be remembered but the process of search itself. The finding of the missing thought is

the conclusion of the 'syllogism'. The famous passage in *De Mem.*, 482 *b* 17-24, finds a novel and interesting interpretation. The geometrical figure to illustrate the text seems unquestionably right, and the fundamental structure, at least, of the philosopher's thought, is shown freed from the rubbish under which commentators had buried it. On the other hand the ἀπορία of equal difficulty in *De Anima*, 431 *a* 20 *sqq.*, is left as insoluble, but without any reference being made to the fresh light that has been thrown upon it by M. Rodier, who indeed is in this volume not once mentioned.

Mr. Beare criticises Aristotle and the ancients generally for neglecting the element of synthesis involved in every perception, however simple it may at first sight appear. Such a criticism is, no doubt, justified in so far as it calls attention to the rudeness of the classification which opposes the perceptions of the special senses to all others as the simple to the complex. Yet, though it be true that synthesis is really to be found in every perception and even in every element (*e.g.*, the sensation of red) which analysis can detect in any complete presentation, we must not overlook the fact that the simple and the complex are relative to each other, that relatively to any particular synthesis the elements must be given as simple and that the 'givenness' of the elements to be united by synthesis is as real a fact as the synthesis itself. We must be prepared to accept a datum at some point or other. In certain classes of perception this 'givenness' is a much more impressive fact for our consciousness than the synthesis. Hence the grounds for the distinction between special sense and all more complex perception. Further, it was, I conceive, the fact that a datum of magnitude, motion, number, etc., must be *given* in every perception that led Aristotle to classify these κοινά apart from ordinary cases of complication (*e.g.*, the perception of the white as sweet or as 'the son of Diares') due to the retention of the effects of past experience. The point is, that in the latter case the sweetness (only previously a given element) is inferred from the whiteness, while there must always be a present datum of quantitative determination in every sensation, however complex the quantitative *judgment* may be. That is to say, the magnitude is as directly present to consciousness as the colour. But it is quite natural that there should be more chance of error in the judgment based upon this direct apprehension of quantitative character than in that which identifies the sensation as belonging to a definite sense-quality. The fact that all the predicates of quantity belong to a standard made uniform for all the various parts of the body capable of apprehending magnitude shows that the dispositions re-excited must be much more complex than in the case of the apprehension of red as red. Hence comes the greater risk of deception in the case of the apprehension of τὰ κοινά, especially in such cases as Aristotle quotes (*e.g.*, φαίνεται ὁ ἥλιος ποδιαῖος), where the uniformity of the standard cannot be in the particular instance verified.

The direct experience of a present sensuous datum lying at the basis of the quantitative judgment renders it, on the one hand, akin to the perception of the ἴδια αἰσθητά, and so distinguishes it from perception of τὰ κατὰ συμβεβηκός, however much its inferential character affiliates it to the latter. To say, as Mr. Beare wishes, that the κοινά are matter of inference does not sufficiently explain them.

Nothing has been said to shake our respect for Aristotle's psychological insight in assigning the determinations of magnitude, figure, motion, etc., to sense. They are αἰσθητά in so far as they are given elements in sensuous experience, while at the same time they are κοινά in involving a discrimination which detects their presence in more than one class of sensation. The presence of a common element in sensation constitutes the possibility of a world of knowledge and, while it may be said that the κοινά are κοινά because they are the objects of κοινὴ αἴσθησις—the faculty for which a world of knowledge exists, that properly understood is identical with the other reason assigned for calling them κοινά, namely the fact that they *are* common sensibles. Mr. Beare quite unnecessarily asks what is the αἴσθησις to which τὰ κατὰ συμβεβηκὸς αἰσθητά are directly objective, as opposed to that to which τὰ κοινά are objective. To do so is to assume gratuitously that there is some special faculty restricted to the apprehension of τὰ κοινά. But if κοινὴ αἴσθησις is understood as being (what the name implies) discrimination appearing outside any of the ἐναντιότητες mediated by a special organ, then no difficulty arises; κοινὴ αἴσθησις is not a faculty restricted to the apprehension of any one pair of opposite qualities or any group of such pairs of contraries. If to it magnitude, figure, etc., are given presentations, that fact does not impede it in its function of comparing past with present or correlating the data of the diverse special senses. The real difficulty in interpreting Aristotle lies in the tendency of κοινὴ αἴσθησις (more than once remarked by Mr. Beare) to invade, in its character of a faculty of discrimination and correlation, even the province of special sense.

The final part of Mr. Beare's volume is taken up with a very full and careful presentment of the evidence as to the ultimate seat of sensation and the relation of the central to the peripheral sense organs. What appears to us to be the wavering treatment of this subject by Plato and Aristotle is clearly revealed. After reading the account of the matter here given, the reader will possibly wonder if the ancients felt the significance of these problems in the same acute way as we do, and perhaps it might have been better if our author had given a lengthier account of the presuppositions, scientific and philosophical, which made psychological questions generally in ancient times so different from those we now propound. One hears Aristotle's epistemological attitude frequently characterised as one of 'naïve' realism. Now it would be interesting to discover to what extent his realism is actually 'naïve,' *i.e.* untroubled by certain doubts which mature experience inevitably brings, and

how far its apparent innocence is really the result of inborn sagacity which has not needed to pay too dearly for its schooling by scepticism. Moreover, when nowadays such an Aristotelian doctrine as that of the objectivity of secondary qualities is criticised, it seems to be assumed that modern science or modern philosophy has some commonly accepted theory of the relation of primary to secondary qualities, whereas, while some scientific men are frankly Democritean on the subject, a recent philosophy wishes to sweep both into the dust-heap of appearances. A restatement of the relations between the ancient cosmology and the results of modern science, physical and psychological, is urgently required. In the light of more adequate knowledge of both, the Hegelian summary of a hundred years ago is now inadequate. In particular, the epistemological implications of Aristotle's psychology badly need appraising.

It is a striking fact that, for Aristotle, the problem of perception seems to be solved when he has explained how a physical stimulus is transferred to the organism of the percipient subject, whereas for modern psychology the most serious of all difficulties presents itself just then; it seems to be a "magic change" by which the retinal image in the eye of the percipient becomes for him a field of vision. The necessity (ignored by the ancients) for any such change occurring is due to our way of thinking of the retinal image as a purely physical fact and of the field of vision as purely psychical. For Aristotle any object of consciousness has its full existence only as an object of consciousness. (It is one thing to be a professing idealist and subscribe to this doctrine and another thing to use it as a principle of scientific explanation.) Though the physical pre-condition of sensation is the transmission of the εἶδος of the sense-object from extra-organic space to the organism of the percipient, yet this εἶδος has actual existence only in the act of sensation. The object apart from sensation is a ὑποκείμενον (not a complex of primary qualities merely, as Democritus and many modern physicists would say, but a 'construction'—to talk psychologically—in which any sensuous element may be represented); and, however sure Aristotle is that the ὑποκείμενα of sensation exist apart from sensation (*cf. Metaph.*, 1010 *b* 30 *sqq.*), the fact remains that apart from sensation they remain ὑποκείμενα only. The physical fact is thus a construction from psychical data and, though this fact alone may not help us much in understanding how the retinal image, which would be such a construction for the percipient, supposing he could see the picture in his own eye, becomes transformed into a field of vision, the difficulty may be due to our having chosen to start with attempting to comprehend one of the most highly developed of sensuous processes, instead of beginning with sensation at its lowest level. In Psychology, as in Biology generally, nothing is clear without the historical explanation. For us the act of vision is not the consciousness of the cerebral processes which cause it, nor indeed for anything sentient is sensation an awareness of

neural change as such. Such a cognition is a construction, and one of a most complex kind, out of the act of sensation. Nevertheless it would be quite plausible to believe that, for primitive intelligence, the act of sensation is primarily an awareness of its own organism as extended and qualified by sensation of specific quality (colour, sound, odour, etc.) in much the same way as we now think of the body as the seat of pain. To be plain, the animal would not see its eye or its brain as red or think its body was red, but cognise it as the source of the purely psychical fact, the sensation of redness. The knowledge of the body as a magnitude is, of course, nothing directly given, but a construction out of the common qualities of sensation, or one of them, *viz.*, extensity. But the organism with its immediate environment must be the most primitive of all constructions, and our knowledge of space as a whole must be built outwards (and inwards) from the sentient surfaces which are the primitive construction from tactual data. Thus gradually will sensations of colour, etc., come to be referred to objects lying beyond the organism, *i.e.* the power to cause these sensations will be the colour of the objects. But here the fundamental difficulty to be explained is not how the physical becomes psychical, not how a given cortical process produces the apprehension of colour or magnitude, but how the psychical becomes physical, *e.g.*, how sensation becomes the apprehension of a cortical process. The reason why the sensation of red is associated with the stimulation of a definite sensory area in the brain must be a purely biological one, which cannot be understood until the complete development of the sentient organism is unravelled. That is to say, there can be absolutely no connexion between the quality of the sensation of red and the specific nature of the cortical substance, the changes in which mediate the sensation; the demarcation of specific sensory areas must be in some way due to the motor consequences of perception. All this is a matter for physiology. The profounder and more peculiarly psychological question is how the knowledge of a world of objects red and otherwise qualified is built up. But in both spheres alike an historical account of the matter is the only one likely to yield us satisfaction.

Modern psychology by at first neglecting the historical method found itself confronted with insoluble problems. Continually the questions arise—Why has the body a soul, and why has the soul a body? Confronted with the brute fact that we see only when our eyes are open it can offer no explanation why this should be so. Since the percipient considered is the thinking substance of Descartes which can 'think away' the body as easily as any other part of heaven or earth, and to which the body is an object as foreign as any other, there is no reason why the action of one object—the external thing, upon another—the organism, should have anything to do with its psychic history. But, if it is the case that the external object as a fact for knowledge can only exist as an extension of or growth from the primitive consciousness

of the organism, then the question as to why the soul has a body is answered. It exists in order to mediate between consciousness and the external object. What is at first a vague somatic consciousness is transformed into the vision that pierces to the stars.

The ancient psychology always had the embodied individual in view. The self was a being already identified with part of the spatial universe. Here ancient thought showed itself sensible of historical fact. For Aristotle, when a κίνησις entered the body it entered the self, *i.e.* became known. Hence with primitive simplicity he thought that the κίνησις which effected entrance into the organism was the εἶδος, the knowable aspect of the external thing. Yet, though we may smile at the *naïveté* of his conception, we can see behind it his instinctive grasp of the fact that bodily consciousness is the prior fact historically, that our consciousness of the qualities of external objects is a more elaborate construction out of the same psychical elements which were involved in the more primitive and vague consciousness, and that the more complex construction is only possible because the simpler preceded it. He erred in believing that it was the κίνησις which was the ὁμοίωμα of the external object and not merely the consciousness, which was originally consciousness of the κίνησις, and now *is* consciousness of the external object.

The whole-heartedness with which the ancients accepted the notion of the embodied self to some extent explains the conflicting statements of even the same writer as to the seat of consciousness. When one thinks of the organism generally as being identified with the conscious subject, then the eye or any part receptive of stimuli may be spoken of as a seat of consciousness; when it is borne in mind that an act of consciousness requires the co-ordination of the stimuli belonging to various senses, then a central organ is indicated. The spatial continuity of the substance of central and peripheral organs would be a sufficient ground for the psychic unity which, Aristotle well knew, was itself more than spatial continuity. Interpreters of such Platonic expressions as μέχρι ψυχῆς πλαγὴν διαδιδομένην (*Timæus*, 67 B, *cf.* 64 B) may differ as to whether this implies a soul itself having spatial position and residing internally in much the same way as Descartes would have it. One thing seems clear, that any Aristotelian statements of similar purport (*e.g.*, *De An.*, 408 *b* 15-18) are only illustrations of the popular way of speaking which the writer sometimes adopts when not at the moment intent on pressing his peculiar theory; the soul is for him always the εἶδος only of some concrete thing. Yet the various passages which deal with the central organ all seem to point to a belief in some specially psychical part and probably also in some specially psychical substance. Mr. Beare has given an interesting account of this substance, the σύμφυτον πνεῦμα or θερμόν. He does not follow up Neuhäuser in all his speculations on this point, but simply reminds us that Aristotle seems to identify it not only with the substance of the celestial bodies, but more interesting

still in view of the impending reconstruction of all physical theories of matter, with what we should call the protoplasm of the germ-cell.

At its most romantic point Mr. Beare closes his narrative. For what he has given them scholars and thinkers cannot be too grateful. His work is of the highest order of British scholarship, which, if sometimes tardy in yielding fruit, produces it at last with nothing lacking in the way both of ripeness and of soundness.

G. R. T. Ross.

The Life of Reason: or the Phases of Human Progress. By George Santayana. London: Archibald Constable & Co., 1905. I. "Introduction and Reason in Common Sense," pp. ix., 291. II. "Reason in Society," pp. viii., 205. III. "Reason in Religion," pp. ix., 279. IV. "Reason in Art," pp. ix., 230.

Mr. Santayana has apparently no great esteem for modern philosophy; "Modern philosophy not helpful" is the heading of a paragraph in his Introduction. To "the transcendental" German philosophy in particular he refers almost contemptuously; "visionary insolence" is his epithet. And yet I can find no readier way of indicating the scope of his own work than by comparing it with a German philosophy of the Hegelian type. Whether he was conscious of it or not, the scheme of his work obviously suggests such a comparison. Reason in Society, Reason in Religion, Reason in Art, would serve quite well as titles for a Hegelian philosophy of social institutions, religion and art, while Reason in Common Sense may be described as a sort of phenomenology of mind. If the comparison is by no means favourable to Mr. Santayana, he has his own ambition to thank.

There are two all-important respects in which Mr. Santayana, essaying what is, broadly speaking, a similar task, falls very far short of the standard set by the Hegelian philosophy. In the first place he keeps far less close to the concrete facts of human mind and history in the provinces of human life with which he deals—and that because he has a far less adequate knowledge of these facts. It can be for no other reason that he habitually prefers to indulge in general reflexions, often commonplace, often hazy, on general topics, *e.g.*, war, the aristocratic ideal, democracy, superstition, mythology, rather than devote himself to a close philosophical analysis of, *e.g.*, the actual structure of society and the actual religious beliefs of mankind. And in the exceptional cases where he does adopt a rather more concrete treatment, as in his chapters in volume iii. on Hebrew and Christian religion, the result is not perhaps much better. The type of philosophy which Mr. Santayana cultivates can justify itself before special science only if it brings to the comprehension of their common data a more

exacting ideal and a more penetrating method. That Hegel's philosophy did in part so justify itself is shown by the great influence it exerted on, *e.g.*, the historical study of Christianity. If, on the other hand, such a philosophy differs from the corresponding sciences only in being more vague, superficial, and inaccurate, its justification disappears altogether. Now, if by "Reason in" social and religious phenomena we mean, as I suppose we must, the essential human significance of these phenomena, I am quite sure that we shall get a much better exposition of the "Reason in," *e.g.*, Hebrew and Christian religion in even the more popular volumes of, say, Wellhausen and Harnack than we do in the pages of Mr. Santayana.

The second very important respect in which Mr. Santayana falls very far short of the Hegelian standard with which his work invites comparison, is that he has a quite inadequate consciousness of the necessity for a systematic and critical method in a philosophical treatise. From this point of view also it is a grave fault that his treatment of a topic so often consists in stringing together a number of general reflexions in a manner more suited to a semi-popular magazine article than to a philosophical work. In such a work one looks, if not for the severity of a dialectical demonstration, at any rate for a connected series of propositions established by consecutive argument. But Mr. Santayana is much more inclined to assert than to argue. Moreover, he takes very little pains to qualify his assertions; sweeping generalisations seem more to his mind than the accurately qualified propositions at which science and scientific philosophy aim. Finally, the reader's sense of these deficiencies is by no means lessened by observing the dogmatic superiority of Mr. Santayana's tone and the lack of simplicity in his style, which latter resembles his matter in being often more ambitious than successful.

Before proceeding to other and more favourable comments it may be well to illustrate these adverse criticisms by the quotation of some passages from the volumes which lend themselves most easily to it, those on Society and Religion. The concluding paragraph of volume ii. gives a summary of the book which may also be taken as its programme:—

> Society has three stages—the natural, the free and the ideal. In the natural stage its function is to produce the individual and equip him with the pre-requisites of moral freedom. When this end is attained Society can rise to friendship, to unanimity and disinterested sympathy, where the ground of association is some ideal interest, while this association constitutes at the same time a personal and emotional bond. Ideal society, on the contrary, transcends accidental conjunctions altogether. Here the ideal interests themselves take possession of the mind; its companions are the symbols it breeds and possesses for excellence, beauty, and truth. Religion, art and science are the chief spheres in which ideal companionship is found.

It is the sort of programme we might get in a work of the Hegelian school, and one from which, if worked out with adequate

knowledge and insight, we might expect much. Of the actual working out some idea may be formed from the following quotations from chapter vi. on "Free Society". The chapter opens as follows:—

Natural society unites beings in time and space; it fixes affection on those creatures on which we depend and to which our actions must be adapted. Natural society begins at home and radiates over the world, as more and more things become tributary to our personal being. In marriage and the family, in industry, government and war, attention is riveted on temporal existences, on the fortunes of particular bodies, natural and corporate. There is then a primacy of nature over spirit in social life; and this primacy, in a certain sense, endures to the end, since all spirit must be the spirit of something, and reason could not exist or be conceived at all unless a material organism, personal or social, lay beneath to give thought an occasion and a point of view, and to give preference a direction. Things could not be near or far, worse or better, unless a definite life were taken as a standard, a life lodged somewhere in space and time. Reason is a principle of order appearing in a subject-matter which in its subsistence and quantity must be an irrational datum. Reason expresses purpose, purpose expresses impulse, and impulse expresses a natural body with self-equilibrating powers. At the same time, natural growths may be called achievements only because, when formed, they support a joyful and liberal experience. Nature's works first acquire a meaning in the commentaries they provoke; mechanical processes have interesting climaxes only from the point of view of the life that expresses them, in which their ebb and flow grows impassioned and vehement. Nature's values are imputed to her retroactively by spirit, which in its material dependence has a logical and moral primacy of its own. In themselves events are perfectly mechanical, steady and fluid, not stopping where we see a goal nor avoiding what we call failures. And so they would always have remained in crude experience, if no cumulative reflexion, no art and no science had come to dominate and foreshorten that equable flow of substance, arresting it ideally in behalf of some rational interest. Thus it comes to pass that rational interests have a certain ascendency in the world, as well as an absolute authority over it; for they arise where an organic equilibrium has naturally established itself. Such an equilibrium maintains itself by virtue of the same necessity that produced it; without arresting the flux or introducing any miracle, it sustains in being an ideal form. This form is what consciousness corresponds to and raises to actual existence; so that significant thoughts are something which Nature necessarily lingers upon and seems to serve. The being to whom they come is the most widely based and synthetic of her creatures. The mind spreads and soars in proportion as the body feeds on the surrounding world. Noble ideas, although rare and difficult to attain, are not naturally fugitive (pp. 137-139).

From this hazy and pretentious talk it is a relief to turn to a passage of sensible, if not very profound, reflexions such as the following on Comradeship:—

Comradeship is a form of friendship still akin to general sociability and gregariousness. When men are "in the same boat together," when a common anxiety, occupation, or sport unites them, they feel their human kinship in an intensified form without any greater personal affinity subsisting between them. The same effect is produced by a common

estrangement from the rest of society. For this reason comradeship lasts no longer than the circumstances that bring it about. Its constancy is proportionate to the monotony of people's lives and minds. There is a lasting bond among schoolfellows because no one can become a boy again and have a new set of playmates. There is a persistent comradeship with one's countrymen, especially abroad, because seldom is a man pliable and polyglot enough to be at home among foreigners or really to understand them. There is an inevitable comradeship with men of the same breeding or profession, however bad these may be, because habits soon monopolise the man. Nevertheless a greater buoyancy, a longer youth, a richer experience, would break down all those limits of fellowship. Such clingings to the familiar are three parts dread of the unfamiliar and want of resource in its presence, for one part in them of genuine loyalty (pp. 147-148).

But from this level we descend soon after to a passage of crude analogy and generalisation :—

The human race, in its intellectual life, is organised like the bees : the masculine soul is a worker, sexually atrophied, and essentially dedicated to impersonal and universal arts; the feminine is a queen, infinitely fertile, omnipresent in its brooding industry, but passive and abounding in intuitions without method and passions without justice. Friendship with a woman is therefore apt to be more or less than friendship : less, because there is no intellectual parity ; more, because (even where the relation remains wholly dispassionate, as in respect to old ladies) there is something mysterious and oracular about a woman's mind which inspires a certain instinctive deference and puts it out of the question to judge what she says by masculine standards. She has a kind of sibylline intuition and the right to be irrationally *à propos*. There is a gallantry of the mind which pervades all conversation with a lady, as there is a natural courtesy toward children and mystics ; but such a habit of respectful concession, marking as it does an intellectual alienation as profound as that which separates us from the dumb animals [! !], is radically incompatible with friendship (p. 149).

Or take the delineation of Protestantism in vol. iv. first in the abstract and then more concretely :—

Taken externally, Protestantism is, of course, a form of Christianity ; it retains the Bible and a more or less copious selection of patristic doctrines. But in its spirit and inward inspiration it is something quite as independent of Judea as of Rome. It is simply the natural religion of the Teutons raising its head above the flood of Roman and Judean influences. Its character may be indicated by saying that it is a religion of pure spontaneity, of emotional freedom, deeply respecting itself but scarcely deciphering its purposes. It is the self-consciousness of a spirit in process of incubation, jealous of its potentialities, averse to definitions and finalities of any kind, because it can itself discern nothing fixed or final. It is adventurous and puzzled by the world, full of rudimentary virtues and clear fire, energetic, faithful, rebellious to experience, inexpert in all matters of art and mind. It boasts, not without cause, of its depth and purity ; but this depth and purity are those of any formless and primordial substance. It keeps unsullied that antecedent integrity which is at the bottom of every living thing and at its core ; it is not acquainted with that ulterior integrity, that sanctity, which might

be attained at the summit of experience through reason and speculative dominion. It accordingly mistakes vitality, both in itself and in the universe, for spiritual life (pp. 115-116).

A passage like this seems to me, I must confess, for the most part mere 'havers'. And when Mr. Santayana becomes more definite his characterisation is hardly one of which a serious historian of religion would approve :—

> Protestantism is the exact opposite of all this [*viz.* the primitive Gospel]. It is convinced of the importance of success and prosperity; it abominates what is disreputable; contemplation seems to it idleness, solitude selfishness, and poverty a sort of dishonourable punishment. It is constrained and punctilious in righteousness; it regards a married and industrious life as typically godly, and there is a sacredness to it, as of a vacant Sabbath, in the unoccupied higher spaces which such an existence leaves for the soul. It is sentimental, its ritual is meagre and unctuous, it expects no miracles, it thinks optimism akin to piety, and regards profitable enterprise and practical ambition as a sort of moral vocation. Its Evangelicalism lacks the notes, so prominent in the gospel, of disillusion, humility and speculative detachment. Its benevolence is optimistic, and aims at raising men to a conventional well-being; it thus misses the inner appeal of Christian charity which, being merely remedial in physical matters, begins by renunciation and looks to spiritual freedom and peace. Protestantism was therefore attached from the first to the Old Testament in which Hebrew fervour appears in its worldly . . . form (pp. 116-117).

Such passages as these are not fitted to produce a very favourable impression, and yet they are not, I think, unfair samples of a large part of the contents of Mr. Santayana's volumes. The subject of Art naturally affords abundant scope for similar writing. And as regards the volume on "Reason in Common Sense," I will only say that it shares the inherent defects of such a phenomenology with its mixture of psychology and metaphysics, and adds to them the characteristic defects of the author's own manner of treatment. In particular it contains frequent large, but loose and inaccurate, allusions to the history of philosophy.

Yet it is not that Mr. Santayana is not capable of better things. Take, for instance, the following excellent remarks in answer to sceptical doubts as to the possibility of passing beyond immediate feeling to a knowledge of reality :—

> An answer to these doubts will perhaps appear if we ask ourselves what sort of contact with reality would satisfy us, and in what terms we expect or desire to possess the subject-matter of our thoughts. Is it simply corroboration that we look for? Is it a verification of truth in sense? It would be unreasonable, in that case, after all the evidence we demand has been gathered, to complain that the ideal term thus concurrently suggested, the supersensible substance, reality, or independent object, does not itself descend into the arena of immediate sensuous perception. Knowledge is not eating, and we cannot expect to devour and possess *what we mean*. Knowledge is recognition of something absent; it is a salutation, not an embrace. It is an advance on sensation pre-

cisely because it is representative. . . . We may look for all the evidence we choose before we declare our inference to be warranted; but we must not ask for something more than evidence, nor expect to know realities without inferring them anew. They are revealed only to understanding. We cannot cease to think and still continue to know (i., 76-77).

A good deal more in the same context might be quoted, but one's appreciation of such passages can hardly be allowed to alter one's general judgment of the work as a whole.

I regret that I have to speak of Mr. Santayana's work in these terms, because I believe that, if he had been content to work on a less ambitious scale, and write in a simpler style, he might have produced a most interesting and useful book. As they stand his volumes are not parts of a single system in the Hegelian sense, nor do they really work out the truth of their respective subjects from the inside in Hegelian fashion. The fact seems rather to be that Mr. Santayana has reached a general metaphysical view of human life in relation to its cosmic environment, and has then proceeded to illustrate this view from, or apply it to, various provinces of human life in succession. But for mere purposes of illustration it was by no means necessary to work on such a large scale. And the only result of doing so is to force upon our observation the fact that the author's opinions too often proceed, not from an inner mastery of the subjects discussed, but from the application of an external standard of judgment to them. It is indeed strangely remarked by the author himself in passing from the first volume to the other three that "illustrations might have been sought in some fictitious world, if imagination had not seemed so much less interesting than reality" (i., 291). Whereas if Mr. Santayana had been content in a single volume to state simply and concisely his general metaphysical view of human life, and the grounds on which he holds it, I believe, as I said, that he would have produced a very useful work. Not that I think his view is fully thought out or free from very grave difficulties, but rather that he seems to represent an attitude (perhaps common enough) to present-day problems, which it would be most desirable and interesting to have clearly expressed and carefully examined. With some labour one might perhaps succeed in putting together a statement of this metaphysical view from the volumes before us, but the labour is hardly one which an author can expect his reviewer to undertake. So far, however, as, in defect of such labour, I may have rightly understood the general drift of Mr. Santayana's thought, I should say that he is endeavouring to show how far an idealistic interpretation of human life can be carried within the limits imposed by a thoroughgoing acceptance of the conclusions of scientific naturalism and positivism. Consciousness and reason, he seems to maintain, are to be regarded as supervening somehow upon a merely physical order; will has no real efficacy, but is merely the symbol of unknown natural forces which actually produce the effects attributed to it; purposiveness belongs to the

cosmic process only in so far as man's preferences lead him to predicate it; "Reason" itself apparently maintains its footing in an irrational universe only for the precarious term of man's existence. And yet, although in relation to the total cosmic process the "Life of Reason" (*i.e.* human progress or man's pursuit of ideals) has a very narrow range and a precarious subsistence, it is this life that is the all-important fact in the universe for us; from it all values arise, and by relation to it all values must be measured; and however natural, physical, or irrational it may be in its origin, basis, and limits, yet, so far as it does subsist, it has its own warrant within itself, and need seek no external support. Such, if I have understood him rightly, is the general tendency of Mr. Santayana's view. I do not myself think it is a view which can really be worked out in a coherent form. But it has the merit of boldness, and one would have been glad to see it presented in a way more calculated to do it justice.

H. Barker.

The Philosophy of Religion: A Critical and Speculative Treatise of Man's Religious Experience and Development in the Light of Modern Science and Reflective Thinking. By George Trumbull Ladd, LL.D. London: Longmans, Green & Co., 1906. 2 vols., pp. xx., 616, and xii., 590.

Prof. Ladd must be congratulated on bringing to a close an extensive scheme of philosophical publication with this large and important work. The book before us is a very learned one; the amount of research and reading involved in writing it must have been exceedingly great. I do not know any other treatise on the subject which shows superior knowledge of the relative literature. The work is a most elaborate one, running to some 1200 pages of closely printed matter. Indeed the great length of the book may prove a drawback; for after all the student's time is limited, and the literature dealing with religious problems is vast. I cannot help thinking that if the author had devoted less space to the outposts of his subject, and had given a more concise and closely reasoned treatment of its central problems, his book would have stood a better chance of receiving the attention it deserves.

Prof. Ladd's standpoint and method are sound. He has learned the lesson, which is as old as Aristotle, that we can best attain to the meaning of an object by studying it in its development. Indeed the care and fulness with which the evolution of religious ideas is treated are among the salient features of these volumes. We must take pains to ascertain the facts, for in the sphere of religion as elsewhere philosophy is "the application of reflective thinking to experienced facts". Then, as Prof. Ladd sees, religion involves all the activities of the soul and cannot be construed in a one-sided way. Neither the purely intellectual nor the pragmatist

interpretation suffices. The ultimate test of religion is indeed rationality, but he would use the word in the larger sense which implies the coherence of psychological, historical and logical valuations. Prof. Ladd's distaste for extreme views is apparent throughout; *medio tutissimus ibis* might serve as motto for many of his discussions. It seems partly the result of this tendency that he sometimes states his conclusions in so balanced and qualified a fashion that one is not quite clear where he stands. The speculative theory underlying the work is, it should be said, in the main that of Lotze: where there is divergence it is in the direction of a more definite Christian theism. But while the author's sympathies are frankly avowed, he is not prejudiced: "the Christian faith is indeed our faith. But for this reason are we all the more sympathetic towards the good and true in all other religions; and none the less faithful to our ideas of what is really good and true, wherever found, in our critical examination and testing of our own religion" (Preface).

It would be impossible within the limits of a review to enter into a detailed examination of these volumes; we can only try to give a general idea of their scope and contents. The first volume deals with the phenomenology (including the psychology) of the religious consciousness. The second volume examines the ultimate validity or ontological value of religious ideas. The most important chapter in a lengthy Introduction is that on 'The Standard of Religious Values'. Here the author decides that Rationality, used as we have seen in a large sense, is the final test; one could have wished, however, a more definite exposition of the relation of rationality and value. In this connexion Prof. Ladd tells us he uses the word Reason 'in a loose but defensible' meaning of the term. Part I. treats of 'Religion: an Historical Development'. The reader will find much evidence of painstaking and systematic study in the chapters on the Nature, Origin, and Development of Religion. At the outset Prof. Ladd tries to give a definition which shall state the minimum or essential content of religion. But such a definition must really be retrospective, and the important point is to grasp the constitutive elements of the religious consciousness. We doubt whether the cumbrous verbal definition given on page 89 is of practical value. In the chapter on the 'Origin of Religion' it is fitly pointed out how little we know of the psychical reactions of 'primitive man'. The chapter which formulates the laws of religious development is less successful. The writer, as it seems to me, errs in treating the subject prior to the study of the psychological factors of the religious consciousness, and consequently his discussion is external. He recognises, of course, that the term *law* is used in a modified sense when applied to religious development; but what precise force is to be attributed to principles like Social Selection, Parsimony, Social and Political Harmony, is not clear and would depend on the way they are related to the inner life of the spiritual self. Part II.

'Man: A Religious Being,' contains, as one would expect from an expert in Psychology, many sound and judicious observations. At the same time one would have liked to have a more direct and connected discussion and valuation of the cognitive, volitional, and emotive elements of the religious consciousness in their relations to and reactions on one another. In the chapters on 'Man as Rational and Free,' Prof. Ladd points out that the rational activities are necessary to make objective the grounds of the religious impulses and emotions, and that the characteristic postulate of reason in religious experience is the *reality* of the object. On the other hand, while the treatment of moral freedom is suggestive, the alternative of determinism or indeterminism is not explicitly faced. The latter part of this section takes up the question of man's physical environment and of his more complex reactions on that environment, which are divided into material (industrial), intellectual, æsthetic, and moral. The intellectual reactions are dealt with under the heading of 'Science, Philosophy, and Religion'. Here Prof. Ladd frankly declares that the claim of Christianity to be the Absolute Religion involves commerce with philosophy. He is on more doubtful ground when, in his anxiety to bring the scientific and religious attitudes into harmony, he seeks to show that both make a similar ontological postulate.

Part III. is entitled 'Religion: a Life'. In the first chapter of this part, 'Faith and Dogma,' the author further develops his view of the ontological aspect of the religious consciousness. "In some good and reasonable sort the faith of the pious man has an evidential value with respect to its own peculiar content" (p. 497); and Prof. Ladd wisely extends the basis of his proposition and rests it on "the solid ground of the spiritual unity of mankind". In other words, the religious ideals must arise out of a ground in Reality, and the experience of faith carries with it an assurance that it has reference to Reality. In this connexion Ladd cites Höffding as holding that faith in value is in some sense a pledge of the reality of value. Yet the way in which Höffding really works out his theory shows that the argument before us needs development in order to meet another form of attack. For Höffding's conclusion is, that critical reflexion on the changing content of religious experience reduces the valid element in it to a bare postulate of faith that value persists in the world-process.

In his second volume Prof. Ladd takes up the ontological side of his subject. Part IV. is headed: 'God: the Object of Religious Faith'; Part V.: 'God and the World'. We cannot attempt to summarise the lengthy exposition of the Idea of God as Infinite and Absolute, and of the Metaphysical and Moral Attributes. The general point of view is indicated in the following quotation: "The Metaphysics of the Divine Being must grow out of human experience historically and reflectively interpreted" (p. 18). Or, as it i argued elsewhere, we cannot construct or understand the concep tion of God apart from the racial experience which justifies it. Thus

Prof. Ladd would recast the ontological argument of Descartes on the basis that the historical evolution of the idea of God is an evidence that God is the sufficient reason of the idea. But I do not understand why he should say that this argument can be presented so as to turn Kant's criticism of it against himself (p. 48). The idea of God historically evolved is a construction or synthesis on the basis of experience as already constituted; Kant's *a priori* synthesis makes experience itself possible. The Kantian position would be turned if it could be shown that the idea of God is involved in the synthetic unity of apperception. Yet Prof. Ladd rejects this view; at all events he is not satisfied with the reconstruction of the ontological argument on these lines by the late Principal Caird. And in the end, agreeing with Lotze, he admits that the 'so-called ontological proof' amounts only to this, "that it is difficult or impossible to regard the conception of God as a purely subjective development".

The general theistic argument is then developed. From experience a regress is made to a World-Ground which is its basis: and the character of this experience further requires us to describe this Ground as Active Will, and more definitely as intelligent Will or Self-Comprehending Mind. The goal which it is sought to reach is, that the "World-Ground may be reasonably conceived as personal and perfect Ethical Spirit". Yet it is admitted that the ethical qualification can only partially be justified by this method. A personal Absolute thus gained, Prof. Ladd thinks that the existence of certain attributes must follow, *viz.* Omnipotence, Omnipresence, Omniscience, Eternity, and Unity. In this connexion, he discusses the relation of the Absolute to space and time. The subject, especially in the case of time, is an exceedingly difficult one, and it is no disparagement in the present instance to say that the treatment is not satisfying. Here, as often elsewhere, Prof. Ladd refers us to other works of his for further discussion of the subject. Still it is a defect in the present volume that the writer does not attack the problem in a bold and direct manner like Prof. Royce, but rather asks what the relation of the Absolute to time must be in order to conserve its character as personal and ethical World-Ground. The transcendental reality of time, we are told, is the all-comprehending life of an Absolute Self. As regards the relation of God to the world, we limit ourselves to saying that Prof. Ladd holds that the Divine immanency and transcendency must be maintained and harmonised. "It is the conception of an Absolute Self, who is perfect Ethical Spirit, which unites and harmonises the two otherwise conflicting conceptions of the immanency and transcendency of God" (p. 282).

Part VI. 'The Destiny of Man,' deals with the future of religion and the race and with the problem of immortality. In an excellent chapter Prof. Ladd examines the bearing of the biological and physiological facts on the question of the soul's independence, and shows that they do not disprove it. His own faith is that God

"will continue to preserve and develop the life of all those whose preservation and progress accord with his most holy and beneficent World-plan" (p. 549). It is interesting to put alongside of this the more reserved statement of Lotze: "Every created thing will continue, if and so long as its continuance belongs to the meaning of the world" (*Meta.*, sec. 245).

This notice is an inadequate one, but the book is too large to be satisfactorily handled in a single review. In closing, we cannot but record our respect for the great learning of the work. We must also express our sympathy with the author's method and with the careful and judicious spirit in which he has executed his task.

G. Galloway

VII.—NEW BOOKS.

Aristotle's Theory of Conduct. By Thomas Marshall, M.A. London: T. Fisher Unwin, 1906. Pp. xxi., 578. Price 21s. net.

The general plan of Mr. Marshall's book is good, and its successful execution would have enriched the literature of Greek philosophy. His object is to present a systematic account of Aristotle's moral philosophy "(*a*) by a general introduction in which the purport of the *Ethics* is summarily set forth; (*b*) by special introductions to the several chapters, with explanatory remarks at the end of each chapter; (*c*) by a paraphrase of the text . . . and (*d*) by the use of modern examples for the sake of bringing Aristotle's meaning home to present-day readers" (pp. 6-7). The book does not profess to be "popular"; the Preface raises expectations of a critical and scholarly treatment. "The *Ethics* is something more than a volume of independent essays on moral philosophy; it is a systematic treatise on that subject forming an integral part of a comprehensive system. . . . Conduct in life is made to fall into its place as a part of Aristotle's encyclopædia of the Sciences, and its principles are shown to depend upon, and are constantly referred back to, those on which organic life and mind depend" (p. 5).

This remark seems to foreshadow a really important line of exposition, rendered necessary by the peculiarity of Aristotle's method. To show that the *Ethics* is not a mere collection or partial codification of current views but a systematic treatise resting on a definite philosophical groundwork would be a valuable undertaking. But for its adequate fulfilment two qualifications are necessary—a very intimate knowledge of previous Greek thought and a thorough acquaintance with Aristotle's own philosophy and terminology. It is doubtful if Mr. Marshall's book indicates his possession of these requisites.

We are certain to misunderstand the *Ethics* if we suppose that Aristotle's doctrine is fundamentally opposed to Plato's. There are, no doubt, differences of theory which one need not "attempt to soften or explain away" (p. 7). Mr. Marshall devotes much space to Aristotle's criticism of Plato's "absolute Forms," and conveys the impression that this antagonism is the normal attitude of Aristotle to his teacher. In spite of the general remark on page 17 he shows no effective recognition that the foundation of the *Ethics* is thoroughly Platonic. Not to mention points of detail—similarities of language and illustration—Aristotle's conception of πολιτική, the account of εὐδαιμονία and ἔργον, the doctrine of ἐθισμός are derived directly from Plato's dialogues. Even the theory of Pleasure is in essentials not opposed to the doctrine of the *Philebos*. Aristotle finds Plato's psychology defective, but his estimate of the ethical value of ἡδονή, and his insistence on a qualitative difference according to the accompanying function are echoes of Plato's teaching. In particular, Mr. Marshall's account of the "Mean" (pp. 37-38, 131 *sqq.*) shows that he has grasped neither the significance nor the historical

associations of Aristotle's thought. It would seem superfluous to note that the theory is Aristotle's expression of the Pythagorean doctrine of πέρας and ἄπειρον which Plato accepts and works out in the *Philebos*. It is therefore astonishing to be told that Aristotle's "conception of moral excellence as moderation is spoken of with contempt by Plato" (p. 131): "No convinced Platonist could accept it, and it is repugnant to modern metaphysicians" (p. 37). Such reflexions prepare us for an unsatisfactory exposition. Mr. Marshall has apparently been led astray by a bad rendering of μεσότης, which paves the way for the further misconception of Plato's μετρίους in *Phædo*, 826 (*cf.* note, p. 131). His interpretation of the doctrine, culminating in the remark that "the *difference* between bad and good conduct . . . is a quantitative difference" (p. 132) obviously leaves Aristotle's meaning untouched.

The volume does not fulfil the promise of the Preface to show that the *Ethics* is an integral part of a philosophical system. Mr. Marshall is of course aware that the psychology of the *Ethics* is not Aristotle's own, and he gives us copious extracts from the *De Anima* and *De Motu Animalium*. But the two accounts are not harmonised. And yet, if the systematic character of the *Ethics* is to be disclosed, it is clearly imperative to show why Aristotle seems to base his work on "exoteric" writings, and how he brings these into conformity with his own views, for the latter and not "the view favoured by the Academy," as Mr. Marshall thinks (p. 335), form the real groundwork of the *Ethics*. His interpretation of the passage (*Eth.*, 1103 a 1 *sqq.*) in which Aristotle is trying to find a place for τὸ ὀρεκτικόν within the academic "division" is very unfortunate. "The irrational part may therefore be subdivided into the functions of growth and appetite, and the rational part into the functions of reason proper *and of that kind of reason which appeals to, and in favourable cases controls, appetite*" (p. 97). How could such a "division" yield the distinction between διανοητικαί and ἠθικαὶ ἀρεταί which is so important for Aristotle's theory? Such confusion suggests that the elaborate references to the *De Anima* have served no good purpose.

Other two illustrations may be added of the author's failure to disclose the philosophical groundwork of the *Ethics*. No explanation is offered of Aristotle's ready acceptance of Plato's final solution of the question, "How is Goodness produced?" Yet the doctrine of ἐθισμός is no mere absorption of Plato's thought, but a deduction from the distinction in *Metaphysics* (bk. viii., ch. v.), between ἄλογοι δυνάμεις and δυνάμεις μετὰ λόγου, under the latter of which are included the capacities of τὸ ὀρεκτικόν. Again, Mr. Marshall rightly regards as "unsatisfactory" (p. 118 note) Aristotle's proof that goodness of character is a habit; but no explanation is given why Aristotle should seem content with it—except perhaps the reflexion that "Aristotle knew how to skate over thin ice when it suited his purpose" (p. 117 note). (The ice is of course academic and thin enough no doubt.) But though he seems content to rest his doctrine on a position admitted by the Academy, its real basis is to be found in the *Physics* (bk. vii., ch. iii.), as Prof. Burnet has shown (*Ethics of Aristotle*, p. 69).

The sixth book is one of the most important and complicated sections of the *Ethics*. From the maze of distinctions, however, two points emerge with tolerable clearness. (1) Aristotle, starting from an academic and a Platonic position which he does not really accept, succeeds in establishing a distinction between φρόνησις and σοφία, which, however, is not Platonic. Mr. Marshall's commentary throws little light on the reason and successive steps of this surprising dialectic movement, and yet the sudden transition to the psychology of the *De Anima* (ch. ii.) might be thought a hint too obvious to be ignored. (2) The main argu-

ment is—besides *ἠθικὴ ἀρετή* there is another type—intellectual goodness—of which the former is the foundation and condition. Of intellectual goodness *σοφία* is the higher form, the *ἀρίστη καὶ τελειοτατη ἀρετή* of book i., ch. vii. The "theoretic" life is therefore the *ὅρος τῶν μεσοτήτων*—the *σκοπός* which the *φρόνιμος* has in view in the determination of action. How far Mr. Marshall has grasped the significance of this book and its bearing on book x. may be seen from the following comment: "On the whole it cannot be said that the sixth book fulfils its announced purpose of informing us how to arrive at the precise point in the mean at which we ought to aim. . . . We expect to hear of a kind of reason which will answer practical questions, such as, 'How often should I forgive my brother? Seven, ten, or how many times?'" (pp. 377-379). To formulate a detailed code of rules for guidance in particular cases was wholly foreign to Aristotle's purpose. His object is to answer the question—What is the supreme end, the kind of life that can most truly be called 'happy'? The sixth book points to the supremacy of *σοφία* by showing that *φρόνησις* is "inferior" and subservient to it.

The reader will occasionally find Mr. Marshall's interpretation of special passages not a little perplexing. His rendering of the phrase *κατὰ τὸ ἄριστον καὶ τὸ εὖ*—"if we look to its final cause"—would need some explanation. His note on *τιμή* (p. 79) and the translation of *τῶν γε δυνάμεων οὐκ ἔστιν* (1101 b 12)—"it is not a facultative good"—are hardly intelligible; "the man in the middle" for *ὁμέσος* is certainly quaint. Aristotle's remark (1097 b 17)—*ἔτι δὲ πάντων αἱρετωτατην μὴ συναριθμουμένην*—elicits a curious note. The passage means that happiness, being the totality of all possible good, cannot be regarded as one good thing among others, or be weighed against any other good. Mr. Marshall explains (p. 68): "We should choose happiness above all things even if we took no account of anything else . . ." and adds, "This will hardly do; what Aristotle says amounts to this: 'Put happiness by itself into one scale and all other good things into the other scale, and happiness will outweigh them all; . . . for if you take the very smallest good out of its own scale, and put it into the scale with happiness, there would be a preponderance of happiness'. Doubtless there would, but as there was that preponderance before, the statement does not advance matters." "Whether happiness would be more desirable if some other blessing were counted in with it" is "scarcely a practical question; what does it matter as long as we are happy?" (p. 38 note). This is perhaps one of the wildest notes that Aristotle's elliptical writing ever suggested.

The last sections of bk. ii., ch. vi. (1107 a 8-27), are an obvious corollary of the doctrine of the Mean. Aristotle is urging that of certain feelings and acts (envy, murder) and of extremes (cowardice, injustice) there can be no mean—*i.e.* they cannot be states of a well-balanced soul. Similarly of any mean (bravery) there can be no extreme—*i.e.* such *μεσότητες* cannot be altered in either direction and yet retain their character as states of a well-balanced soul. Mr. Marshall, however, thinks this "one of those pieces of logical ingenuity with which Aristotle sometimes amused himself and his hearers; it would no doubt be an excellent subject for discussion after the lecture, 'Can you be moderately immoderate or unpunctually punctual?'—but it is little more than a game of words" (p. 38). Misconception of Aristotle's doctrine could hardly go further.

JOHN SIME.

Studies in Philosophy and Psychology. By Former Students of Charles Edward Garman, in commemoration of twenty-five years of service as Teacher of Philosophy in Amherst College. Boston and New York: Houghton, Mifflin & Co., 1906. Pp. xxi., 411.

The thirteen essays contained in this volume are dedicated to Prof. Garman 'as an expression of the gratitude, admiration and affection of his students'. They are written by a number of his former pupils who now hold important positions as teachers of Philosophy, Psychology, Political Economy and Christian Theology in various American Universities and Colleges. As is bound to be the case in such a volume, the essays are unequal in length and in importance, but on the whole they contain much that is excellent, and Prof. Garman may well take a proud pleasure in surveying the harvest that has sprung from the seeds which he has sown in twenty-five years of philosophical teaching.

Quite one of the best things in the volume is the letter of Prof. Garman himself which is reprinted by way of a preface from the *American Journal of Psychology* where it first appeared (in 1898). It gives an excellent account both of the practical methods and of the guiding principles which Prof. Garman follows in his philosophical teaching. One may not wholly agree with the details of his course as sketched on pages xvii. ff., but the ideals from which Prof. Garman has drawn his inspiration as a teacher are of the very highest. Indeed, this letter is one of the finest pieces of practical wisdom which the present reviewer has ever read, and it deserves the careful consideration of every teacher of philosophy. Prof. Garman is deeply convinced that the study of philosophy is the best means for building up character and the best preparation for the demands that life makes upon us. It is a wholesome doctrine, and one much needed even outside of America. There is space but for one or two quotations: 'It is my conviction that a young man can obtain inspiration, enthusiasm, absence of self-consciousness only by the steady contemplation of great truths' (p. xi.), and 'if you can get a man so far along as to make him have confidence in the power of weighing evidence, to realise how much civilisation owes to it, how every department of life can be progressive only through scientific thinking, and then make it a moral question, and show that intellectual honesty and supreme choice of truth for truth's sake, and determination to follow evidence to the best of one's ability, is the great line of cleavage between the saints and the sinners—if you can force the issue here, and win, then the classes are entirely different afterwards. I do not believe without this moral battle, without considering the ethical phases of the question, it would be possible to get the best intellectual results' (p. xvi.).

The fruits of this teaching are evident in all the essays that make up the book. Everywhere the authors show a determination to think for themselves, and weigh the evidence afresh; and in more than one case this leads to novel and interesting results. Thus Prof. Woodworth, writing on 'The Cause of a Voluntary Movement' (Essay xii.), gives a most effective criticism, based both on experimental results and general considerations, of the usual doctrine that voluntary movements are possible only through the mediation of a kinæsthetic image of the movement to be performed. Prof. Woodworth shows not only that the image need not be kinæsthetic, but that there need be no imagery at all, and that it is quite possible to identify the intended movement without calling up the images of the sensations which accompany its performance. His paper thus falls into line with the protests that have lately been raised by others against the exaggerated importance attributed to imagery in mental life. It is mostly a by-product, of little functional

importance, either in thought or in volition. A very good point in the paper is the distinction between the image of the movement to be performed and the actual sensations arising from the present position of the limb. The latter, by forming the existential basis against which the idea works, help to define the movement. And it is their absence (not that of kinæsthetic images) which explains the impossibility of voluntary movements of anæsthetic limbs. The results of this essay are further supported by Mr. Burnett in 'An Experimental Test of the Classical Theory of Volition' (Essay xiii.). Prof. Pierce in a vividly written 'Appeal from the Prevailing Doctrine of a Detached Subconsciousness' (Essay xi.) gives a trenchant criticism of the rank mythology that some psychologists talk about the subconsciousness. Treated as a *fact*, it is a leap into the unknown and unknowable; treated as a *hypothesis*, it is superfluous, as the ordinary means of explanation are adequate even to cases of hysteria and multiple personality. Throughout Prof. Pierce is very successful in assimilating abnormal to normal phenomena (*e.g.*, in showing that the 'inrushes' from the subliminal self which Myers invokes to explain genius, are characteristic of the most ordinary and everyday thinking), and so far his conclusions will be of value even to the pure Psychologist who hesitates to follow the author into his explanations by means of cerebral dispositions. The other two essays dealing with psychological problems are Prof. Swift's on 'Beginning a Language: a Contribution to the Psychology of Learning' (Essay x.) and Prof. Delabarre's 'Influence of Surrounding Objects on the Apparent Direction of a Line' (Essay ix.).

There are eight Essays on Philosophical Subjects: i. Prof. Tufts, 'On Moral Evolution'; ii. Prof. Willcox, 'The Expansion of Europe in its Influence upon Population'; iii. Mr. R. A. Woods, 'Democracy, a New Unfolding of Human Power'; iv. Prof. Sharp, 'An Analysis of the Moral Judgment'; v. Prof. Woodbridge, 'The Problem of Consciousness'; vi. Mr. Norton, 'The Intellectual Element in Music'; vii. Prof. Raub, 'Pragmatism and Kantianism'; viii. Prof. Lyman, 'The Influence of Pragmatism upon the Status of Theology'. I have space only for a few passing comments. I must acknowledge that I have found Essays iv. and vi. particularly interesting. Prof. Sharp's distinction between 'desires whose object is a certain state as such, and those whose object is this state considered as a good' (p. 108), seems to me to be psychologically sound, in the sense that we do not in every volition will the end *explicitly* because it is good. I suppose, the idea of the end as good arises explicitly only where there is either a conflict between different ends, or where the existing reality resists the realisation of our idea. But where an idea suggested carries itself out at once without conflict or opposition (where, as Prof. Sharp puts it, the agent simply explodes), and where there is, therefore, no idea of the end as good, I should not, personally, speak of *desire*. Essay viii. is perhaps the weakest in the book. The resemblance between Kantianism and Pragmatism is purely superficial, and mainly a matter of skilful quotations, which in the context of the *whole* philosophy have little kinship with each other. Strangely enough, the author does not seize on what *prima facie* is most pragmatic in Kant, *viz.*, the Postulates of the Practical Reason. And he quite overlooks that Kant's *a priori* Categories are anything but Postulates hardened into Axioms by trial and verification which is the Pragmatist's most characteristic doctrine (see Mr. Schiller on *Axioms as Postulates*).

In conclusion, I would repeat that some Essays in this volume deserve more than the *succès d'estime* generally accorded to commemorative productions.

R. F. Alfred Hoernlé.

The Nature and Purpose of the Universe. By JOHN DENHAM PARSONS. London: T. Fisher Unwin, 1906. Pp. 561.

We learn in the course of this work that it was more than half completed when Mr. F. W. H. Myers published his *Human Personality and Its Survival of Bodily Death.* Like Mr. Myers, Mr. Parsons is mainly interested in confirming the hope of Immortality, and in telling us a deal about the subliminal consciousness; but he is not otherwise much in agreement with Mr. Myers, who, he thinks, has somewhat compromised the reputation of the Society for Psychical Research—of which Mr. Parsons is himself a member—by leading people to regard it as homologating the views respecting the subliminal self, the successive reincarnations of human beings as such, and the final absorption of human personality held by Mr. Myers. Mr. Parsons objects to the first of these, and regards the two last as the great Oriental heresies which have poisoned Western thought. He is far from credulous regarding spiritualistic phenomena, and altogether in opposition to the effort to found an ethical or religious system on them; while towards Theosophy his attitude is one of hostility. Himself a Unitarian Christian, he endeavours to prove that his teaching is in harmony with that of Christianity properly understood. He insists that the doctrine of the Resurrection is the Church's "one foundation," but it means "the glad tidings of the survival, thanks to the Logos, of the mental personality, in a body adapted to another plane of existence" (p. 143). And although he does not believe that the mental personality, which constituted the real man, ever existed as such before, still, the automatisms which we inherit point to a previous existence of a practically subhuman individual mind from which the reasoning personality is evolved, and once evolved that mental personality exhibits possibilities which logically demand a wider sphere of action than the conditions of earth can possibly afford. In fact, he believes in a doctrine of progressive and infinite reincarnation. He will consent to no depreciation of the value of finite personality. It is the man's real self, undergoing real changes in a real space and time. Personality is the key to the universe, not a thing to throw away. Finite personalities are a limitation of the omnipresent, ultimate reality "only in the sense of being enriching differences of interior or self-comprehended motion thereof" (pp. 85, 486), whatever that may mean. The subliminal consciousness is that which enables the supra-liminal consciousness to be; it is still submerged in that from which all finite life is born. The subliminal self is man's automaton, inheriting the automatisms necessary for the flesh and blood body; it has innumerable post-natal automatisms called habits forced upon it, and it is the duty of man to keep it in subjection and make it responsive to ennobling influences enlarging the mental personality. "Man is responsible for his action and inaction as regards inherited tendencies, as also for the tendencies created in himself as a cumulative result of the continual exercise of his power of choice as to what suggestions of those reaching him to favour by responding to" (p. 422). The genius is able to keep above the threshold and to utilise more of this subliminal consciousness than other men (p. 379).

The reader is to understand this statement as extracted from a book which, along with much curious erudition and many interesting divagations, contains also much that is rather fanciful and eccentric. An author who discusses the temperature of the after-world (p. 468) must not be surprised if people smile; nor does the present condition of experience make it possible to deal satisfactorily with the hypothesis that man has three bodies (p. 331); but it would be unfair to insist on this

feature too strongly. The distaste with which one viewed the title of this book, the mental confusion caused by being faced on the very first page by an involved sentence of fourteen lines, apparently quoted from the work as indicative of its scope and purpose, but which scarcely conveyed any intelligible meaning, the fact, obvious on merely turning the pages, that the author was not exactly on the level of the philosophical consciousness, were all calculated to produce a prejudice against the work, to a great extent removed when one had submitted himself to the task of reading it patiently through. This in itself was no light labour. Mr. Parsons' style is lumbering, confused and dull at the best, at the worst there are simply no words for it. At least Mr. Parsons' words are too long to quote to show how nearly to distraction he can drive his reader. Opening his book perfectly at random, I light on a sentence containing 203 words. In spite of all this, however, and of his rather curious set of interests and mode of speculation, Mr. Parsons has produced a work by no means to be altogether condemned. Those trained and interested in the technicalities of philosophy cannot be expected to regard it seriously, must, indeed, be expected to dismiss it contemptuously, but that numerous class of people who are taken up with religio-philosophical, mystic and spiritualistic movements are likely to be positively benefited by reading Mr. Parsons. A thread of rational connection—often thin enough—runs through his apparently disconnected topics, and, singular as these are he is certainly a man of sound common sense, and relatively to these others his methods are philosophical and his results valuable. He may be regarded as an ally of those who on more purely philosophical lines oppose Pantheism in religion and Absolutism in philosophy, who in one way or another struggle to preserve the real significance of finite personality and of the world we know in time; but he is an ally in a remote and barbarous scene of operations, fighting with rather disorderly and ill-equipped forces against fantastic and fanatical levies.

DAVID MORRISON.

Studies in the Philosophy of Religion. By GEORGE GALLOWAY, B.D., formerly Examiner in Philosophy in the University of St. Andrews. Blackwood, 1904. Price 7s. 6d. net.

The main purpose of this book is to furnish a proof of the validity of religion, and to show that man's reaching forth in all ages and countries to beings above himself whom he can never fully know is not a mere play of his fancy nor a vain excursion in a land of shadows, but that the object he thus seeks exists, that he stands in such a relation to that object and also to his fellow-beings that he is driven by necessity to make such efforts, and that these efforts accomplish to some extent their aim. The readers of MIND know Dr. Galloway to be an accomplished philosophical writer, well acquainted with modern speculation and capable of holding his own with its leading representatives. The Essays in this book were written at different times and to a certain extent, the reader sees, without reference to each other, yet they do, when taken together, furnish an argument of no small impressiveness. The three opening Essays may be regarded as introductory. That on "Hegel and the Later Tendency of Religious Philosophy," which stands first, traces the change in the interpretation of religion from the purely speculative method of Hegel to the empirical method of to-day, in which feeling is everything and doctrine a matter almost of indifference. The author does not commit himself to either extreme; he is a good deal of an anti-

Hegelian ; on the other hand, he is not a Ritschlian, but insists on the necessity of thought in the constitution of religion. In his second Essay, "The Natural Sciences, Ethics and Religion," he vindicates for Religion its place as an independent human activity to be interpreted from itself. It is not, on the one hand, to be judged by mechanical standards as a subsection of natural science, nor is it to be identified with Ethics, since the ideals to which the latter points are to be found completed and guaranteed only in religion. In this chapter, which is full, as the whole book is, of clear if somewhat rapid arguments on great problems, Dr. Galloway shows a true understanding of what religion is both in its inner nature and in its relation to other parts of human life ; and many passages are at a high level. He is never a mere apologist ; but is always conscious of the claims of the various departments of thought, and of the supreme position of general Philosophy.

In his third Essay, on "Religious Development, Its History and Interpretation," Dr. Galloway's step is scarcely so sure ; nor perhaps is the subject very essential to his general argument. Some of his statements are scarcely up to date ; as when the Sumerians in Ancient Babylonia are spoken of as if their presence there had never been doubted, or Prof. Robertson Smith's view of the origin of sacrifice is spoken of as generally accepted. The teaching of Buddha is contrasted with that of the Brahmins as if it had been a new thing in his mouth instead of having been prepared for centuries, as the Upanishads teach us. Other similar points might be mentioned ; but it is ungracious to complain that a writer who follows so many and so great studies as Dr. Galloway should be at fault about a few things in the great field of the History of Religion. His conclusions regarding the mode in which religion advances from one stage to another are I think correct. They will be found to be in close agreement with the views put forth on the subject in my *History of Religion* (1895) ; though his statement is of course much more ample. He has traced correctly the path by which religion advances to higher forms within a nation ; he has not, however, given attention to the rise of universal religions and the developments which this occasions in the nations to which they come. Nor does he mention the great periods at which a simultaneous religious renewal seems to have taken place in nations widely separated from each other.

The fourth Essay, "The Distinction of Inner and Outer Experience," appeared originally in this Journal. In it and in the fifth Essay, "The Ultimate Basis and Meaning of Religion" (of the sixth Essay, in which the Ritschlian position is criticised, it is not necessary to enlarge), we find Dr. Galloway's special argument by which the universal impulse of mankind to religion is to be explained and justified. His view sets out from a discussion of the nature of our knowledge of the world, which is held to result not solely from the activity of our own minds, as the post-Kantian thinkers held, but also from the activity of things around us, which, as we recognise in our fellowmen beings like ourselves, we recognise as "centres of experience" on a lower plane than ourselves, not placed where they are by any action of ours, and having in them something of animation. From this basis the author proceeds to the further conclusion that the life and activity by which the various centres of experience, human and otherwise, act according to their position, and make impressions on each other, are derived by them from God, of whose central and original activity they all partake, and who is present in them all though not to be identified with them, and expresses himself in them all, as the soul in the body. It will be seen that this view of the nature of things and of the way in which we know them is akin to the tendency of recent speculation as to the constitution of matter, which attributes

some degree of animation to substances formerly regarded as inanimate. If there is activity everywhere, man's knowledge of the world might be thought to be conditioned by that activity, though how this takes place our writer can scarcely be said to explain, much less to illustrate by any examples. Further, if there is activity in every part of the great system in which we live, the step is easy to regarding all this activity as one, and tracing it to a central source, God. This part of his argument also the author has by no means worked out. He acknowledges that the God thus reached is only a mechanical first agent, and goes on to say that ethical attributes have to be added to him by other processes and from another side of the human mind. But the value-judgments thus added to a being who was first attained by so realistic a line of speculation cannot alter his fundamental character, he will always have his being in energy rather than in thought. The present tendency of metaphysics no doubt brings this with it. With some of the great problems connected with the theistic position Dr. Galloway deals; the questions of the divine Personality and Immanence and of human freedom are handled in a fresh and modern style. But he is quite aware that many other great difficulties have to be dealt with before his position can be regarded as worked out. It will not be denied that his philosophy of God and man performs the office expected of it. The connexion between the two is so deep and so substantial that man is driven to seek for God; men having within them something of the divine activity cannot but set out to assure themselves, in spite of every reverse and difficulty, that that power is fully with them; nor can they fail to be interested in those other beings, akin to themselves, in whom something of that power is also present.

I have done no justice to the wealth of matter the reader finds in this book, but have confined myself to setting forth, no doubt inadequately, its central thesis. In a short preface Dr. Galloway speaks very modestly of his own powers, and says that what he offers is not to be regarded as a Philosophy of Religion. Yet the sketch he offers does furnish the outlines of such a work, and most of my criticism is merely to the effect that it is no more than a sketch. It well deserves to be completed.

ALLAN MENZIES.

Free Will and Four English Philosophers (Hobbes, Locke, Hume and Mill). By the Rev. JOSEPH RICKABY, S.J. London: Burns & Oates, 1906. Pp. xi., 234.

This volume in its original form was written in the years 1871-74, and since then it has been subjected to "much castigation and amendment". The author thinks the fact of moral freedom to be of vital importance, but he candidly declares, "While I am much concerned that my reader should not be a determinist, I am comparatively indifferent whether he accepts my explanation of free-will, or any other, or regards the process as inexplicable". The plan followed in these pages, suggestive perhaps of the Scholastic dialectic, is to quote successive passages from the thinker under review, each passage being accompanied by a criticism. A method like this has obvious limitations, but it has advantages. On the one hand, the reader has before him the *ipsissima verba* of the writers dealt with, and, on the other, the discussion tends to gain in point and definiteness. Father Rickaby's style is clear and simple, and he often shows much acuteness in controverting the arguments of the philosophers he criticises. As a rule he is fair even when he is least sympathetic.

It may be well to state at the outset the view of the will advocated by the author. To will at all, he contends, the will must be 'struck by a motive,' which raises in us 'a spontaneous complacency': this complacency in itself is a non-voluntary fact, but under 'advertence,' *i.e.* by being regarded in the light of reflective self-consciousness, it can become a volition. What the author lays stress on is, that the endorsement need not be *immediate:* in fact free-will turns on the absence of such necessity, on the possibility of suspense. He does not regard this negative attitude as itself a volition. The positive act of will is the endorsement of a 'complacency' after deliberation; it is free because the agent might have abstained from eliciting the act.

Naturally Father Rickaby finds a great deal to object to in the determinism of Hobbes, and sees nothing 'moral' in his philosophy. The passages quoted from Hobbes are contained in his controversial writing against Bishop Bramhall entitled "Of Liberty and Necessity". There is no reference to the well-known definition of the will given in the *Leviathan* as "the last appetite in deliberating"—so suggestive of Hobbes's naturalism. With Locke our author is on better terms, although he passes various criticisms on the chapter on 'Power' in the *Essay*. But he agrees with Locke's amended view of free-will as "the power to suspend the prosecution of this or that desire," with the qualification that for 'prosecution' he would read 'ratification,' and treat the suspension not as a volition but as the absence of one.

The section on Hume contains some valid criticism of Hume's sensationalism, his neglect of the part played by the agent in moral action, and his reduction of the phenomena of mind to the same kind of uniformity as obtains in outer experience. "Reflex consciousness, the power of adverting to our own mental states," definitely distinguishes mental from mechanical process. But a follower of Hume might plausibly deny that, because our ideas of possible sequences have been enlarged by experience (*e.g.* wounds now curable but once always fatal), therefore his conception of causality as uniform sequence must be revised. Mill's position in the free-will controversy is of course closely related to that of Hume, though he does not ignore the office of the self as will to the extent that Hume does. In this section the arguments of the foregoing section are partially repeated and reinforced. Father Rickaby makes full use of Mill's admission of a power in man to alter his own character, and urges how little this admission avails when the will to alter the character is itself necessarily determined. No Utilitarian, however, would agree that his own theory "supposes that a wicked man, a 'naughty boy' and a restive horse are all on a level as objects of punishment". Nor, as it seems to me, is the writer entirely successful in his treatment of Mill's contention, that to punish a bad act is inexplicable if the act did not proceed from a bad disposition. Any theory of moral freedom must recognise the truth, that an act is not moral if it is not somehow related to character. This fact is not sufficiently considered by our author. It may also be urged against his view, that he makes freedom depend too much on the mere power *not* to will, and that he relates motives in an external way to the character and the self. (They are spoken of as 'striking' on the will, and of suffering "a sort of refraction in the character upon which they impinge".)

On the whole, the strength of the book lies less in the positive theory it enunciates than in its shrewd criticisms of determinist doctrine. Yet Father Rickaby can appreciate a writer whose opinions are far apart from his own, as the following reference to Mill proves: "Disagreeing with Mill in many things, I have never ceased to cherish for him a certain admiration. Since I first opened his pages nearly forty years

ago, I have ever admired his clear, incisive thought, his logical acumen, and his candour, shining out, as it often does, at the expense of his consistency."

G. Galloway.

Reconnoitres in Reason and the Table Book. By Norman Alliston. London: Kegan Paul & Co., 1906. Pp. 280.

This is the work of a clever amateur. His essays, on such subjects as "The Limits of Determinism," "Eventuality," "The Perversity of the Will," "Force," "Motion," etc., show that he is able to reason closely, and make one regret that he does not exhibit more acquaintance with the history and technicalities of philosophical speculation. That would have prevented him from labouring in his essay on "Contraries" a point so obvious as that contraries are what stand farthest apart upon a scale of some kind, and would have made him see that his investigation of Possibility was inadequate in his discussion of Determinism, where he certainly says some good things. Altogether one feels that he is not dealing with the perplexities of philosophy properly so called, but moves throughout on the level of average intelligent reflexion struggling to its own conclusions regardless of academic guidance. To find that his article on "Self-Consciousness" deals mainly with the phenomenon of Shyness illustrates the sort of surprise he has in store for his philosophical reader. The second part of his book is a *mêlange* of judgments, apothegms, and witticisms (generally very weak) on literature and things in general. In this part the author's critical faculty has too frequently deserted him and allowed him to print things of no value and things of a perfectly pointless absurdity, such as "Bradshaw is the English Kant". He writes with a certain fastidiousness, but somehow his style is a dull one. You gather generally that he is of a rather cynical humour and a little impressed, as most amateurs in philosophy tend to be, by the pessimistic view of experience.

D. M.

Clinical Lectures on Neurasthenia. By Thomas D. Savill, M.D. (Lond.). Third edition, revised and enlarged. London: Henry J. Glaisher; New York: William Wood & Company, 1906. Pp. xvi., 216. Price 7s. 6d. net.

This is the third edition of Dr. Savill's clinical study of neurasthenia. He has added considerably to the material of previous editions. He gives still greater prominence to the theory of auto-intoxication as a cause of neurasthenia. Gastric and intestinal derangements were found in 71 per cent. of a series of eighty-three cases. He advocates greater investigation of the bacteriology of the alimentary tract. The book is lucidly written, it is admirably printed, it has a good bibliography and a good index. It is a sound introduction to a difficult subject. The psychologist will find here some cues for further speculation.

W. L. M.

La Démence. Par le Dr. A. Marie, Médecin en chef de l'asile de Villejuif. Avec 42 figures dans le texte. Paris: Octave Doin, Éditeur, 8 Place de l'Odéon, 1906. Pp. 492. Price 4 fr.

This is one of the volumes of the *Bibliothèque Internationale de Psychologie Experimentale, Normale et Pathologique*, issued under the direction of Dr. Toulouse, chief physician of the asylum of Villejuif. In the present study, Dr. A. Marie deals in detail with dementia

— its psychology and pathology. It should not be necessary, but perhaps it is not inadvisable, to assert, as he does in the preface, that the book is not metaphysics, but science. The text-books on insanity are not yet entirely free from the ancient modes of statement, and dementia may fairly be said to "form part of the last chapter of pathology won by medicine from metaphysics". The book starts from the position that nervous and mental activity are simultaneous and correlative, and dementia is only a particular psychological state that supervenes on an organic or functional alteration of the cerebral organs. "Thus the psychoses come within the category of bodily maladies by the same title as all other maladies." This, of course, leaves untouched the question of metaphysical monism or dualism. Chapter i. deals with the general psycho-pathology of dements, dementia being defined as "a mental sequence characterised by enfeeblement or loss, partial or total, of the intellectual, moral and emotional faculties, no restoration being possible". But diagnosis is extremely difficult and delicate. Dr. Marie details the series of questions put by Dr. Toulouse and Dr. Damaye to differentiate types of dementia and progressive mental confusion. Nothing but prolonged clinical observation can determine certain cases, so fleeting and elusive are the symptoms. As a pathological basis, Dr. Marie describes the characters of the neuron. The amount of historical interpolation makes the exposition here somewhat difficult; but, substantially, the organic basis of dementia is "an alteration of the psychical atom named the neuron, injured at first and essentially in its dendritic expansions, with cellular isolation and autonomy, as the result" (p. 26). The correlative result is rupture of psychical associations. Good illustrations of the structure of the neuron and its variations are given from the latest authorities. In the later part of the book, many observations are given to confirm this hypothesis; but hypothesis it must meanwhile remain. The fact that it is necessary to account for is that all the dementias are a progressive disestablishment of mental functions without the possibility of restoration, and the neuron isolated beyond the possibility of renewing touch with the neighbouring neuron is certainly a permissible conjecture, which has a good deal of pathological observation behind it. Chapter ii. gives a general account of the psycho-physiology of dementia. The scheme devised by Toulouse, Vaschide and Pierron, in their "technique of experimental psychology," is based on the division of states of consciousness into sensations (internal or motor and external) and images (sensorial and intellectual). These are all studied under four rubrics: (*a*) quantity (intensity), covering attention correlated with new states, memory correlated with old states; (*b*) quality (affectivity), positive or pleasure, negative or pain; (*c*) tendency to objectify,—sensory, correlated with belief and certitude, motor, correlated with desire and voluntary movement; (*d*) affinity (positive or negative),—discursive (associations of ideas or automatic imagination), synthetic (perception and hallucination, constructive imagination, conception, judgment, reasoning, ideal volition). The general synthesis of these characters constitutes the personality. There is a considerable amount of quantitative detail given under attention, memory, will, etc.; but Ribot's general sequence of amnesia is on the whole verified in every case of dementia. This chapter is somewhat overloaded with quotation; but the richness of reference is a great advantage in a book of this character, especially when references are to special experimental researches not readily available. Chapter iii. is a general historical sketch. Here a certain feeling of confusion results from the wealth of terminology. The net result, however, is that the dementias may be classified into, first, the premature dementias of puberty (dementia precox), and the rapid secondary

dementias that can be compared with it; second, the dementias of the adult—general paralysis and pseudo-paralysis; third, the senile and organic dementias. The remainder of the book is taken up with detailed discussion of these varieties

In chapter iv. there is an elaborate discussion of the "precocious" dementias. Usually, the term "dementia precox" covers a somewhat vague group of symptoms, and it is doubtful whether they are correlated with a definite cerebral lesion. Dr. Marie regards the disease as due to a primary alteration of the neuron and its prolongations or their derivatives, there being no alteration of the vessels. The integrity of the vessels accounts for the fact that the life of the patient is not compromised. The effect of toxins on the progress of the disease, the progress and sequence in the destruction of faculty, are discussed with much detail, and there is a hope expressed that the elaborate study of symptoms may reveal some definite opening for therapeutics. This chapter shows how far the methods of study have advanced from the time when melancholia and mania were counted as adequate descriptions of mental states. The analysis, both mental and physiological, will here repay detailed study. As in all the recent works, auto-intoxication has a prominent place. Chapter v. deals with the paralytic dementias, which are more familiar to the ordinary student. Chapter vi. discusses the senile dementias. The return to mental childhood is illustrated by some striking examples, which indicate that the normal decay is a real regression to infancy, not a perversion of adult acquisitions. A considerable amount of positive detail is given to show the pre-demential stage of old age. Dr. Marie inclines to the Metchnikoff theory of senility. The last chapter contains Dr. Marie's general conclusions. Dr. Marie has been one of the pioneers in the developing of home-relief for the insane (*assistance familiale*). He has done a great deal to show that the re-establishing of the bonds of the home tends to such restoration of function as is possible on the lower mental level of the dementias. He gives some evidence that in asylums the acute and possibly curable dementias are drowned in an ocean of other insanities, which tend to hasten the demential sequence. As Moreau of Tours said thirty years ago: "Isolation is, they say, the first condition for the treatment of a lunatic, but in an asylum the patient is rather sequestered than isolated" (p. 449). The whole tendency of modern psychical treatment is away from the barrack asylum and towards the family colony. There are twenty-five pages of bibliography. The book is intended for scientific students of insanity, and it ought to be one of the most valuable in a valuable series.

W. Leslie MacKenzie.

Les Auto-mutilateurs: étude psycho-pathologique et médico-légale. Par le Dr. Charles Blondel. Paris: Librairie Médicale et Scientifique, Jules Rousset, 1 Rue Casimir-Delavigne, 1906. Pp. 132. Price 3 fr.

This is a useful little volume. It aims rather at a consecutive account of illuminative facts than at a general theory. "Nous avons laissé partout la parole aux faits." The chief topics discussed are: Voluntary Castration (*l'eunuchisme*); Voluntary Enucleation (*l'œdipisme*); Voluntary Burning (*le scævolisme*); Cotard's *délire de negation*; Military Automutilation. The general conclusion is that whatever the apparent motive may be, the act of self-mutilation is always the result of a morbid mental state; but the act is never an exclusive (or pathognomonic) symptom of a defined affection. The composition is compact and lucid; there are full references to articles and cases; the volume will be a very useful handbook both for the alienist and the medico-legalist.

W. L. M.

Personalismus und Realismus. Von HANS DREYER. Berlin: Reuther & Reichard, 1905. Pp. vii., 119.

This brightly written little work shows unmistakably the influence of Eucken. It is written round the main idea that to become a Personality is the task of each man, which he cannot accomplish apart from the assimilation of the Theological Idea. Every scientific investigation, all critical reflexion has an analytical character, and is accordingly an imperfect instrument for dealing with the synthetic personalistic sphere. Thus, rejecting the synthesis of a real unity of the world, or of the real unity of the empirical character of the individual, there only remains the ideal of a synthetical unity as a task, the nature of personality pointing us beyond the limits of the individual. The true Categorical Imperative is: *Handle dem Ideal der synthetischen Einheit gemäss.*

Schets eener critische Geschiedenis van het Substantiebegrip in de nieuwere Wijsbegeerte. By Dr. P. H. RITTER. Leiden: E. J. Brill, 1906. Pp. 476.

It is to be regretted that unfamiliarity with the Dutch language will restrict the number of the readers of this extremely well-written critical history of the concept of Substance in modern philosophy. After a short but useful introduction (16 pp.), the origination of substance theories by the Greek Philosophers is set forth at some length (76 pp.); the next section discusses the history of the concept in the Middle Ages and later (169 pp.)—here we note the names of Cusanus and Bruno, Descartes and Geulincx, Spinoza, Leibniz, Locke, Berkeley, Hume; and in the third section we find the development of the problem in modern times in the hands of Kant, Herbart, Lotze, Fichte, Schelling, Hegel (162 pp.). A short concluding chapter (49 pp.) deals with contemporary Philosophy, as represented by the following thinkers: Wundt, Bradley, Sigwart, Ostwald and lastly Gompertz, to whose treatment of the problem a separate paragraph is devoted, a sign of the great importance which the author attaches to his "pathempirical" substance theory.

The work seems to us to have been very well done on the whole; the exposition is extremely clear and admirably adapted to the taste and capacity of the non-expert reader, for whom the work is obviously intended. The last part is perhaps the least successful; the representatives of contemporary Philosophy appear to have been selected somewhat at random from amongst philosophers and scientists, and too little is done to enlighten the reader on a question which would be sure to interest him more than any other,—the relation of modern scientific thought to the substance problem. We think that some of the earlier work might with advantage have been somewhat condensed to make room for an amplified systematic exposition of the problem as it stands at the present day; in that case the author might have found an opportunity, which the reader would have gladly welcomed, for expounding his personal views, which have now to be gathered from scattered remarks throughout the book.

J. P. K.

Received also:—

J. B. Baillie, *An Outline of the Idealistic Construction of Experience*, London, Macmillan, 1906, pp. xx., 344.

Helen Bosanquet, *The Family*, London, Macmillan, 1906, pp. vi., 344.

John S. Mackenzie, *Outlines of Metaphysics*, Second Edition Revised, London, Macmillan, 1906, pp. xv., 175.

R. L. Nettleship, *Memoir of Thomas Hill Green*, with a Short Preface specially written for this edition by Mrs. T. H. Green, with Portraits, London, Longmans, 1906, pp. vii., 256.

Thomas Whittaker, *Apollonius of Tyana and other Essays*, London, Sonnenschein, 1906, pp. 211.

Francis Ellingwood Abbot, *The Syllogistic Philosophy or Prolegomena to Science*, Boston, Little, Brown & Co., 1906, 2 vols., pp. xii., 317; 376.

Douglas Macleane, *Reason, Thought and Language, or the Many and the One*, a Revised System of Logical Doctrine under the Forms of Idiomatic Discourse, London, Frowde, 1906, pp. xv., 583.

G. F. Arnold, *Psychology applied to Legal Evidence and other Constructions of Law*, Calcutta, Thacker, Spink & Co., 1906, pp. ix., 470.

Mary Hamilton, *Incubation or the Cure of Disease in Pagan Temples and Christian Churches*, St. Andrews, Henderson & Son, London, Simpkin, Marshall & Co., 1906, pp. 223.

Edgar L. Hewett, *Antiquities of the Jemez Plateau* (Smithsonian Institution, Bureau of American Ethnology, Bulletin 32), Washington, Government Printing Office, 1906, pp. 54.

Teitaro Suzuki and Dr. Paul Carus, *T'ai-Shang Kan-Ying P'ien*, Treatise of the Exalted One on Response and Retribution, Chinese Text. Verbatim Translation. Translation, Introduction, Notes, etc., with 16 Plates and Frontispiece, Chicago, Open Court Pub. Co., London, Kegan Paul, 1906, pp. 135.

Edwin Ash, *Hypnotism and Suggestion*, a practical handbook, London, J. Jacobs, 1906, p. 134.

William Smith, LL.D., *The Vocation of Man*, by Johann Gottlieb Fichte, translation. Biographical Introduction by E. Ritchie, Ph.D., Chicago, Open Court Pub. Co., London, Kegan Paul, 1906, pp. vii., 176.

Th. Ribot, *Essai sur les passions*, Paris, Alcan, 1907, pp. vii., 192.

Ferdinand Tönnies, *Philosophische Terminologie in psychologisch-soziologischer Ansicht* (*Ausgezeichnet mit dem Welby-Preis*), Leipzig, Theod. Thomas, pp. xvi., 106.

Robert Saitschick, *Französische Skeptiker, Voltaire, Mérimée, Renan*, pp. vi., 306, *Deutsche Skeptiker, Lichtenberg, Nietzsche*, pp. vi., 239 (Zur Psychologie des neueren Individualismus), Berlin, Hofman & Co., 1906, separate vols.

Hans Pichler, *Über die Arten des Seins*, Wien & Leipzig, Braumüller, 1906, pp. 59.

Benedetto Croce, *Ciò che è vivo e ciò che è morto della filosofia di Hegel, Studio Critico seguito da un saggio di Bibliografia Hegeliana*, Bari, Laterza & Figli, 1907, pp. xvii., 282.

Lorenzo Michelangelo Billia, *L'oggetto della Psicologia, Discorso al V congresso internazionale di psicologia in Roma*, Firenze, Ufficio della "Rassegna Nazionale," 1906, pp. 21 (off-print).

Ernesto Quesada, *Las doctrinas presociológicas*, Buenos Aires, J. Menéndez, 1905, pp. 89 (off-print).

Ernesto Quesada, *La crisis universitaria, Discurso pronunciado el* 17 *de Agosto de* 1906, Buenos Aires, J. Menéndez, 1906, pp. 53.

Ernesto Quesada, *La Facultad de Derecho de Paris, estado actual de su enseñanza*, Buenos Aires, Coni Hermanos, 1906, pp. x., 356.

VIII.—PHILOSOPHICAL PERIODICALS.

Philosophical Review. Vol. xv., No. 5. **J. Dewey.** 'Experience and Objective Idealism.' [Idealism stands forth with the assertion of thought or reason as (1) the sponsor for all significance, ideality, purpose, in experience; the author of the good and beautiful as well as the true; (2) the power, resident in pure conceptions, requisite to elevate perceptive or observational material to the plane of science; and (3) the constitution which gives objectivity, even the semblance of order, system, connexion, mutual reference, to empirical data which, without its assistance, would remain mere subjective flux. Regarded from any one of these three points of view, idealism is left in a position of instable equilibrium, from which it can find release only by euthanasia in a thorough-going empiricism.] **J. E. Creighton.** 'Experience and Thought.' [Philosophy must recognise that experience consists from the first in an attitude of a subject to other subjects and to objects; that it is essentially a life consciously lived in relation to an environment. The attitude of the human subject to the world is a demand for a rational life, and its experience is the process by which that end is progressively realised. The concrete form of experience may be termed 'thought,' and the activity through which the subject realises its demand for a rational life is judgment. At any given point, the conscious life may be described as a continuous judgment; and the complete continuity of experience implies the subordination of the various ends of life to one all-embracing purpose, the attainment of rationality in all its modes of experience. From this point of view, it is impossible, with pragmatism, to resolve the problem of knowledge into a series of specific problems which have reference only to some immediate situation, or to accept the antithesis between thinking and 'concrete ways of living'.] **J. A. Leighton.** 'Ethics, Sociology, and Personality.' [The historical, evolutionary or sociological method of approach to ethics is of the utmost value in the study of the facts of morality, both in their existing forms and in their genesis. But the study of codified social morality forms, after all, only the peripheral part of the area of ethical inquiry. Beyond accepted social values are the critical attitudes of self-conscious persons; and it is, *par excellence*, an ethical problem to determine how, in a changing or relatively stable social structure, as the case may be, the individual may realise and express personal values. Intrinsic values can neither be explained from nor conceived in terms of anything other than the inner reactions of rational persons to situations that call for conscious deeds.] Discussions. **W. B. Pitkin.** 'The Intention and Reference of Noetic Psychosis.' [Criticises Colvin on the grounds: (1) that his definition of noetic intention makes the extramental world include all past and future pleasures and pains, and (2) that he identifies experience of persistence with persistent experience.] **S. S. Colvin.** 'Rejoinder.' [Accepts the first criticism, and defends the position; meets the second objection by discrimination of the psychological from the logical attitude.] **E. G. Spaulding.** 'Driesch's Theory of Vitalism.' [Discussion of Driesch's *Die Seele als Naturfaktor, Naturbegriffe und Natururteile*, and *Der Vitalismus*. The author has created illegitimately a *Naturkonstant*, for which he fails to find a *rôle*

that cannot be played by the 'constants' already at hand, and which also contradicts his own statements about the *rôle* of these constants. There is as much or as little necessity for an entelechy in the inorganic as in the organic world.] Reviews of Books. Notices of New Books. Summaries of Articles. Notes.

Psychological Review. Vol. xiii., No. 5. **F. Arnold.** 'The Psychology of Interest, II.' [Interest is not to be identified with feeling or attention. On the conative side, it consists in a felt bodily attitude, excited by a given situation, and guided by ideational contents referring to the future; on the cognitive side, it may imply: (1) simple awareness, in which the meaning is merged in the presentation, or (2) a single idea or image of a future state, or (3) a system of ideas present as a disposition, and when explicated existing in a series. Interest has three kinds: desire, expectation and curiosity; and three stages: primary, secondary and acquired. Its concomitants are attention, apperception, and possible feeling, present or revived. It exhibits the laws of spontaneous expression and motor control, imitation, habit, appetition and aversion, apperception.] **F. Kuhlmann.** 'On the Analysis of the Memory Consciousness: a Study in the Mental Imagery and Memory of Meaningless Visual Forms.' [A group of meaningless visual forms, 5 to 9 in a group, was presented to the observer, once only, for ten minutes. Immediately afterwards, and again at intervals varying from two to ninety days, the observer recalled the forms, and gave an introspective account of the nature of the imagery, the course of the process of recall and recognition, etc.; he also drew the forms, from memory, as accurately as possible. The introspections (with some little aid from the drawings) serve as material to determine the nature of the imagery employed in the recall of a given impression; the drawings (interpreted in the light of the introspections) help to determine the nature of memory errors and the causes that produce them. It is significant that the visual imagery, which naturally tended to come to the front, proved to be so inadequate that at many points associative processes were resorted to in order to re-establish the impression in its full integrity. Errors in imagery follow the line of least resistance: incorrect but easy images are substituted for correct and difficult.] Discussion. **S. F. Maclennan.** 'Organisation in Psychology.' [With a single exception, text-books of psychology are failures, because they lack organisation, have no continuous plot and plot-interest, neglect the functional polarity of the psychical and the physical. The author obligingly outlines a plan of arrangement which, if followed, will relieve the aridity of psychological study, brighten the life of the teacher, and enable future psychologies to reflect in their structure and movement the organic unity of the life which they describe.]

The British Journal of Psychology. Vol. ii., Part 1, July, 1906. This part contains a number of particularly interesting and important articles. **G. F. Stout.** 'The Nature of Conation and Mental Activity.' [Conation is a complex experience which, however, contains as one of its elements 'a simple and unanalysable element uniquely characteristic of it—an element from which the whole derives its distinctively conative character'. This unanalysable element is described as a 'felt tendency,' and is shown not to be identical either with motor sensation or with 'affection,' *i.e.* pleasure and pain. Prof. Stout, however, admits that felt tendency and affection, though distinguishable, do not occur separately, and he proposes to use the term 'interest' to express 'the unity of conative and affective characters in the single process'. Finally, there are some remarks on the difficulty of experimentally investigating cona-

tion. Throughout there is much criticism of Mr. Bradley's theory of volition, as developed in recent numbers of MIND.] **W. G. Smith.** 'A Study of some Correlations of the Müller-Lyer Visual Illusion and Allied Phenomena.' [A record of experiments testing the correlation of normal estimation of a plain line with the two forms of the illusion (magnifying and diminishing) and with the variations of visual and kinæsthetic memory. Perhaps the most interesting among the results is: 'There is negative or inverse correlation between normal estimation and the magnifying illusion, and positive direct correlation between normal estimation and the diminishing illusion: over-estimation of the plain line goes with a large diminishing illusion and a small magnifying illusion, while with under-estimation the reverse relation holds'. And this means that 'each form of the illusion tends to reach its maximum effect where the pre-existing tendency, apparent in normal estimation, is in the opposite direction'.] **W. H. Winch.** 'Immediate Memory in School Children. No. II. Auditory.' [Record of experiments continuing the author's experiments on visual memory, see *British Journal of Psychology*, i., p. 127. General conclusions: Pure memory, *i.e.* memory of percepts associated only in time and space, is capable of marked improvement by practice; and is, on the whole, more efficient in proportion to general intellectual proficiency.] **Beatrice Edgell** and **W. Legge Symes.** 'The Wheatstone-Hipp Chronoscope. Its Adjustments, Accuracy and Control.' [A record of experiments designed to test the influence of various factors on chronoscope readings: intensity of current, remanent magnetism, spring tension, and accuracy of clockwork, to which the authors add a new factor: resistance of circuit. The general conclusion is: 'The chronoscope, in accuracy and durability, is a thoroughly reliable instrument, having a range more than sufficient for reaction time measurements'.] **C. Spearman.** '"Foot-rule" for Measuring Correlation.' [A new formula for the quick and easy measuring of correlation. The relation of the new 'R' method to the old 'r' method of Pearson $\left(r = \frac{\Sigma x y}{n \sigma_1 \sigma_2}\right)$, after a certain simplification of the latter, is shown to be $r = \sin \cdot \left(\frac{\pi}{2} \mathrm{R}\right)$. The convenience of the new formula, in avoiding the tedious and complicated calculations of the old method, whilst giving results that differ only in the third decimal, seems to be very great.] Proceedings of the Psychological Society, 27th January, 17th March, 14th July, 1906.

INTERNATIONAL JOURNAL OF ETHICS. Vol. xvii., No. 1, October, 1906. **W. R. Sorley.** 'Ethical Aspects of Economics, I.' [Economic facts are a portion of a wider group of facts, without reference to which they cannot be understood. The *differentia* of economic goods is, that they can be measured in terms of wealth, or of money as representing wealth; which, again, can be valued only in relation to them. Hence value (in exchange) depends on worth, or value that is independent of exchange. Accordingly we must proceed to re-estimate the worth of economic goods by reference to a higher than the economic standard.] **F. Harrison.** 'Positivists and Dr. Coit.' [Reply to article in previous number.] **J. A. Hobson.** 'The Ethics of Internationalism.' ["The conception of a real republic, by which is meant an effective democracy, is essential to the achievement of peaceable relations between the nations of the world. . . . If only we get republics of that order, and not till then, shall we be able securely and effectively to achieve this great condition of a society of nations animated by the true spirit of humanity."] **D. S. Muzzey.** 'Medieval Morals.' ["A brief analysis of the import of the dominance of

the papal-imperial idea of unity, of the feudal system, of economic theory, and philosophic methods," in regard to the "customs and usages of social life sanctioned by the conscience of the community".] **F. T. Carlton.** 'Humanitarianism, Past and Present.' [A sketch of the causes and significance of humanitarian movements in the United States.] **M. Macmillan.** 'Bacon's Moral Teaching.' [It anticipates the altruistic teaching of later English moralists: deserves more careful study than it generally receives in the history of English moral philosophy.] **J. W. Howerth.** 'War and Social Economy.' [War may be truly considered as waste. Social economy demands that the revenue hitherto expended upon it should be directed to education, industry, etc.] **W. E. Lishman.** 'Reflections on Kidd's "Principles of Western Civilization".' ["An independent and impartial review of the arguments presented, with the purpose of discovering how far they are adequate to support the author's theory, and therefore how far the theory itself is to be relied upon."] 'The Social and Ethical Value of the Family System in Japan.' Book Reviews.

Proceedings of the Society for Psychical Research. Part liii. Vol. xx., October, 1906. Price 10s. net. Contains an elaborate account of a series of automatic writings by Mrs. A. W. Verrall, which she obtained during the years 1901-4. The first part gives a general account of the character of the script, its form, style, the languages employed (mostly Latin, Greek and English—usually in prose, but occasionally interspersed with verse), drawings, signatures, quotations, etc. It also deals with the matter of the script so far as that has proved either wholly meaningless or unverifiable. The second part deals with the various kinds of verifiable matter that appear in the script, so especially its connexion with dreams; traces of telepathic influence; evidence of supernormal knowledge of events lying beyond the writer's ken; and above all, there is a very full account of 'cross-correspondences' between the writer's script and that of other automatic writers, and the apparent influence of various 'controls'. Finally, there is an Appendix, giving long extracts from the script, and reproductions of various drawings, signatures, etc., as also a variety of other information necessary to the understanding of the script. Whilst it can hardly be said that any single case, by itself, is very strong, the cumulative evidence for telepathic influence and cross-correspondence is not inconsiderable. But it is well to bear in mind how much *interpretation* has been needed in many cases to extract any evidential value from the script at all. Indeed, in the very first lines of the opening chapter, Mrs. Verrall confesses: 'The confusion and obscurity in the writing itself [is] so great, that if I were to reproduce the whole script as it stands, even a very full commentary would fail to make it intelligible'; and again: 'Much of the information, which I believe to be contained in the script, is only to be obtained by piecing together sentences occurring in different bits of writing often separated from one another by considerable intervals of time'.

Revue Neo-Scolastique. Août, 1906. **V. Ermoni.** 'Necessity of Metaphysics.' ["Philosophy in its highest sense and metaphysics are, strictly speaking, two synonymous terms." "The metaphysics of the ancients are causalist and substantialist, while the metaphysics of the new school are anti-causalist and anti-substantialist."] **A. Mansion.** 'Induction in Albertus Magnus.' ["In the schoolmen of the thirteenth century the word induction bears no precise sense; the only idea found in all their researches is that induction is a knowledge based upon particular facts."] **Clement Besse.** 'Letter from France: The Death-agony

of Morality.' **S. Deploige.** 'The Conflict of Morality and Sociology, article IV.' [An exposition of the views of M. Durkheim. This and the preceding article are complementary, showing the new view of morality as a natural science, and the new art of morality now dominant in the schools of France.]

Revue de Philosophie. 1er Septembre, 1906. **E. Mallet.** 'The Philosophy of Action.' [A teleological view of reality, as addressing itself not to intellect alone but to the whole soul: the word 'pragmatism' is deprecated as seeming to ban intellectualism altogether.] **E. Baudin.** 'Newman's Philosophy of Faith.' [That Newman confounds faith with the pictorial realisation of faith in the mind of a fervent believer.] **F. Mentré.** 'The Philosophy of the Sciences according to Cournot.' [That the only philosophy is metaphysics; that metaphysics are barren away from physics and mathematics; that, unlike the sciences, metaphysics do not grow by achieved results, but every metaphysician has to begin all over again for himself.] Three thoughtful articles.—1er Octobre, 1906. **Paul Gaultier.** 'Art Criticisms.' ["There is such a thing as a criticism of beauty, equally removed from dogmatism and impressionism."] **N. Vaschide** and **R. Meunier.** 'Memory of Dreams and Memory in Dreams.' [Experimental proofs that no sleep is dreamless, that dreams are revivals of former sensible experiences, that no sensible experience is ever entirely forgotten.] **E. Baudin.** 'Newman's Philosophy of Faith.' [Fourth and last article. "The great error of Newman was his believing that he could dispense with philosophy to study faith." "We must go beyond Newman, and consent to restore to reason all her function in the examination of the *credo*:" "Newman will remain unhappily a psychologist of genius who has never found his philosophy".] **E. Peillaube.** 'An Article of M. E. Le Roy, Scholasticism and Modern Philosophy.' [Should be read by all who are interested in scholasticism.] —1er Novembre, 1906. **J. Gardair.** 'Our Knowledge of God.' [A reply to M. Sertillanges: this protracted controversy deals with the inquiry of St. Thomas, *Contra Gentiles*, i., 30, what names are predicable of God and how: whether such predication expresses reality or is a mere subjective postulate of a reality beyond us.] **G. Guentin.** 'Free Will.' [The fact that a principle of conduct, clearly discerned, is not always acted upon, shows the need of personal effort to clamp action to principle: in the making or omission of this effort free will lies.] **H. Dehove.** 'External Perception.' [Hallucinations.]

Revue Philosophique de la France et de l'Etranger. 31e année. No. 9. Septembre, 1906. **Paul Gaultier.** 'Qu'est-ce que l'Art?' [Art is not mere imitation: being a synthesis of nature and human sensibility, it has for its aim the creation of Beauty. Beauty is, in its essence, the æsthetic emotion as rendered objective. These two leading ideas are fully and in a very interesting way developed in this paper, which affords also a valuable criticism of adverse theories, and discusses many important questions concerning the fine arts.] **F. Le Dantec.** 'Les Objections au Monisme (2e et dernier article).' [A reply to some criticisms directed against his conception of monism, especially in French Reviews and in M. Vignon's little book. The author reasserts, but without any real demonstration, his doctrine of consciousness as mere epi-phenomenon, and his conception of monism which he holds to be unobjectionable when defined in the following formula (recurring throughout the article like a refrain): "Nothing that is knowable to a man happens without the modification of something that can be measured".] **R. de la Grasserie.** 'Les moyens linguistiques de con-

densation de la pensée.' [In the human mind there are, as in the physical world, phenomena of condensation and of dilatation or rarefaction. Language affords the possibility of observing and measuring them. The paper is devoted especially to study how condensation of thought is effected through the language and through the style, how it is artificially converted into rarefaction, and reciprocally, and ends in showing the factors, the effects, the qualities and the intrinsic defects of this condensation.] Analyses et Comptes rendus.

Revue de Métaphysique et de Morale. 14e année. No. 5. Septembre, 1906. **B. Russell.** 'Les paradoxes de la logique.' [In reply to M. Poincaré. To avoid the vicious circle from which the paradoxes of the transfinite arise it is necessary to adopt a theory analogous to the no-classes theory.] **Ch. Dunan.** 'Légitimité de la Métaphysique.' In reply to M. Belot. Endeavours to prove that there is such a thing as Metaphysics and indicates briefly its ethical value. The author defends what he calls an "*idéalisme expérimental*," which should at the same time be the true positivism.] **L. Brunschvicg.** 'Spinoza et ses contemporains (Suite et Fin).'] Devoted to Pascal and Spinoza himself. Pascal the great source of the "*Apologétique psychologique*" in France, yet was mainly interested to deny what it maintains: the liberty and continuity which joins the natural to the supernatural. For the opposition between the universal and the individual Spinoza substitutes the essential opposition between the individual and the universe. The central problem of his Ethic is the problem of consciousness. The spirit of Spinoza's work still of value.] 'Études Critiques: *L'Idée de Rythme*, par A. Chide.' [Appears to be the work of one of the most complete anti-intellectualists who ever lived.] Discussions: **G. Lechalas**, 'Logique et moralisme.' **G. Dwelshauvers**, 'À propos de l'idée de vie.' Supplement: 'La philosophie dans les Universités (1906-7).' Livres nouveaux. Revues et Périodiques. Agrégation de philosophie.—No. 6. Novembre, 1906. **A. Hannequin.** 'La méthode de Descartes,' 'La philosophie de Leibniz et les lois du mouvement.' [These are unfinished works of the late author. Along with others they are to form part of a forthcoming collection of his unpublished writings.] **Th. Ruyssen.** 'La guerre et le droit.' [Shows how, and by what transitions, war has associated itself to law of which it was originally the negation, and points out the hope we may entertain that some other method better suited to the ends of civilisation may replace war.] **G. Aillet.** 'La responsibilité objective.' [In objective responsibility the rules of conduct do not depend on the individual conscience. Advantages of its study. May be best studied in civil responsibility where the preponderance of the objective element is assured.] Étude critique. 'Principes de morale rationelle par M. Landry.' Discussions: **H. Poincaré**, 'À propos de la logistique.' **A. Fouillée**, 'À propos de l'idée de vie chez Guyau.' **L. Couturat**, 'Logique et moralisme.' Tables des matières. Livres nouveaux, revues, etc.

Archives de Psychologie. Tome v., No. 3. **H. Zbinden.** 'Conception psychologique du nervosisme.' [There is no such thing as hysteria or neurasthenia; there are only nervous symptoms. The primary symptoms are liability to fatigue, anxiety, emotivity, irritability, exaggerated autosuggestibility. The secondary, dependent on direction of attention, are insomnia, dyspepsia, palpitation of the heart, and asthma. The causes may be grouped as hereditary; as predisposing (treatment during infancy, and throughout the adolescent life, from kindergarten to university); and as determining. Too much importance among the latter

has been attributed to emotion, deception, fatigue, overwork: the determining cause is always some form of mental suffering (*souffrance morale*). The cure is a mental re-education, based on the auto-suggestibility of the patient.] **M. C. Schuyten.** 'Sur la validité de l'enseignement intuitif primaire.' [It is a widespread belief that an idea is better retained if it come by way of sense-presentation than if it come by way of reasoning; and also that it is better retained, the greater the number of sense-channels traversed by the presentation. Experiments show, however, that numbers auditorily presented are remembered more accurately than the same numbers appealing to eye and ear simultaneously; also that those ideas of number are the most persistent and useful which are presented in as concentrated a manner as possible.] Recueil de faits; documents et discussions. **E. Claparède.** 'À propos de la grandeur de la lune à l'horizon.' [Interest, concentration of attention, and contrast are the determining factors in the illusion.] **T. Jonckheere.** 'Premier Congrès d'Education et de Protection de l'Enfance dans la Famille, Liège, 18-20 Sept., 1905.' **T. Jonckheere.** 'IV^e^ Conference belge pour l'Amélioration du Sort de l'Enfance anormale.' Bibliographie. Notes diverses.

Zeitschrift für Psychologie. Bd. xlii., Heft 2 und 3. **G. Heymans** und **E. Wiersma.** 'Beiträge zur speziellen Psychologie auf Grund einer Massenuntersuchung, I.' [First part of a report upon the returns received from a questionary upon normal mental heredity, sent to some 3,000 Dutch physicians. The questions covered the topics of movements and mode of conduct; feelings; *Sekundärfunktion* (emotivity, attitude to novelty, sulkiness, obduracy, change of profession, building of castles in the air, etc., etc.); intellect; likes and dislikes; miscellaneous (absent-mindedness, social behaviour, punctuality, liability to laughter, etc., etc.). The returns deal with 437 families.] **M. Levy-Suhl.** 'Studien über die experimentelle Beeinflussung des Vorstellungsverlaufs, I.' [The primary object of the study is to note the reactions of various classes of insane persons to (spoken) verbal stimuli, especially the reactions of those who are themselves constantly speaking; and to discover, if possible, the reactions that characterise different forms of alienation. In this first paper, the author emphasises the necessity of a thorough understanding of the preassociative processes (cognition, recognition, apprehension, preparation), and discusses more particularly the significance and *rôle* of the 'constellation' (in Ziehen's sense).] **O. Veraguth.** 'Die Verlegung diaskleral in das menschliche Auge einfallender Lichtreize in den Raum.' **A. Prandtl.** 'Eine Nachbilderscheinung.' [If, especially in the dark, we move the eye across a bright object, we see a flash or beam of light spring across the space about the object. The beam, if carefully observed, will appear always to travel towards the objective light, in the opposite direction to that of the movement of the line of fixation. The author explains it, not as an illusion of judgment, but in terms of the tailing-off of the positive after-images in the moving eye.] Besprechungen. Literaturbericht.—Bd. xlii., Heft 4 und 5. **A. Pick.** 'Rückwirkung sprachlicher Perseveration auf den Assoziationsvorgang.' [The suggestive influence of motor attitude and expression upon the course of ideas is well known (Braid's hypnotic experiments, Wernicke's motor psychoses, observations of actors and children). The writer reports the cases of two epileptic patients, which show clearly the persistent effect of verbal expression upon the process of association. A name given to an object 'sticks' in the mind of the patient who, becoming rapidly fatigued, is passively dominated by the persistent idea. Fatigue brings about a functional weakening of the primary association, and so allows

the secondary association to gain the upper hand.] **G. Heymans** und **E. Wiersma.** 'Beiträge zur speziellen Psychologie auf Grund einer Massenuntersuchung.' [Conclusion of report and summary of results. (1) The inheritance of mental attributes is beyond question. Out of 630 comparisons based on the study of 105 mental attributes, only 15, or 2·4 per cent., fail to confirm this thesis. (2) Inheritance through the same sex is very much more frequent than crossed inheritance. (3) Direct paternal and direct maternal inheritance show a similar preponderance.] **D. Katz.** 'Experimentelle Beiträge zur Psychologie des Vergleichs im Gebiete des Zeitsinns.—I.' [First part of an experimental inquiry which aims to answer the questions : What influence upon comparison has the variation of the interval separating the two times to be compared ? and What influence upon comparison has a frequent repetition of the standard time ? On the basis of preliminary experiments, the author divides perceptual times into three groups : times up to about 550 σ, times between 550 and 650 σ, and times from 650 to a varying limit of 2,900 to 3,600 σ. He works with standard times of 300 σ (first group), 600 σ (second), and 1,200, 1,800 and 3,600 σ (third). The intervals between times were 1·8 sec. (optimal pause), 0 sec., 0·9 sec., and 14·4, 54, 108 sec.] Literaturbericht. **W. Stern.** 'Kindespsychologie : Pädagogik : dritter Sammelbericht.'

Archiv für Systematische Philosophie. Neue Folge. Bd. xii., Heft 3, 24th August, 1906. **Emil Bullaty.** 'Erkenntnistheorie und Psychologie,' II. (Schluss). [Concludes the criticism of Formalism and Psychologism. These do not directly deal with knowledge, only with its presuppositions. Author endeavours to penetrate the essential nature of knowledge and consciousness and to prove an immediate contact between consciousness and the world of phenomena. The phenomena and the facts of consciousness testify to a transcendent world. The result of the inquiry consists in the most complete separation of experience and knowledge, which results from considering each without prejudice or presupposition. In them are revealed two separate principles aiming at distinguishing the phenomena from the facts of our consciousness.] **O. L. Umfrid.** 'Karl Christian Planck und der Zeitgeist.' [A defence of Planck against what the author conceives to be present-day misconception, especially that of Planck's own son. Planck's Philosophy of Nature and of Morals a veritable doctrine of salvation properly understood. The author's admiration expressed in terms not free from extravagance. Seems to regard the most adorable trinity as composed of Christ, Goethe and Planck.] **Stefan Sterling.** 'Biogenetisches Gesetz in der Psychologie.' [Discusses how far the law of Phylo-Ontogeny is applicable in Psychology.] **J. F. Thoene.** 'Die Welt und die Kategorien des Denkens.' [To prove the Substantiality of Space and a creation from it by God. The conception of Force cannot stand investigation. Matter is simply realised space, in its ultimate nature quantitative not qualitative. The world not too complicated but too simple to understand.] **D. Draghicesco.** 'De l'impossibilité de la sociologie objective.' [An interesting criticism of M. Durkheim and his school. The science of society must be a species of social psychology.] Die neuesten Erscheinungen auf dem Gebiete der systematischen Philosophie. Zeitschriften. Eingegangene Bücher. Zweites Preisausschreiben der Kant-Gesellschaft.

Vierteljahrsschrift für Wissenschaftliche Philosophie und Soziologie. Jahrgang xxx., Heft 3, September, 1906. **Georg Wernick.** 'Der Wirklichkeitsgedanke,' II. Artikel. [In perception of the real there

are no factors lying outside the perception itself. The process by which we hold any content to be real consists in placing it in relation to such contents as are already recognised as real.] **Max Frischeisen-Köhler.** 'Die Lehre von der Subjektivität der Sinnesqualitäten und ihre Gegner.' [This question has been so energetically debated of late that an examination of the grounds for and against the alleged subjectivity appears very necessary. The object of this sketch is to give an account of the arguments on both sides without itself attempting to decide on their merits.] Besprechungen. Selbstanzeige. Philosophische und soziologische Zeitschriften. Bibliographie.

Zeitschrift für Philosophie und Philosophische Kritik. Bd. cxxviii., Heft 2. **R. Reimann.** 'Einige Gedanken über die Organisation des Ideenreichs, mit kurzem Hinblick auf die platonisch-aristotelische Idee.' [An attempt to combine what was common to the teaching of Plato and Aristotle with the principles of modern theistic spiritualism. The writer divides Ideas into personal and impersonal. To the former belong God and the human soul; to the latter, space and time, the forces of nature, the class-divisions of biology, scientific conceptions, artistic ideals, and the great guiding ends of action. The soul of man, being an idea, has a capacity for *a priori* knowledge, and, like the impersonal ideas, can exist without a material embodiment.] **Bernhard Witties.** 'Das Wirkungsprinzip der Reclame.' [How is it that puffing advertisements are so successful in winning purchasers although the public in general see through and despise them? Because the understanding, like the senses, has a passive side of which the advertisement takes possession and thereby actuates the will.] **Heinrich Pudor.** 'Von dem ästhetischen Formen der Raumanschauung.' [A cube standing on a horizontal surface, and an upright square drawn on paper give the impression of greater height than breadth. Lipps explains this by the association of vertical lines with a greater muscular effort. But, according to Pudor, only the upper side of a square looks shorter than the verticals; when it is removed the three remaining sides are seen to be equal. In fact the eye has a rooted objection to parallel straight lines, negating as they do the completion and perfection which it desiderates. Hence the sides of squares, cubes and cylinders are persistently seen as inclined towards one another, thus giving rise to an exaggerated estimate of their vertical as compared with their horizontal dimensions. And for this reason the horizontal lines in architecture demand additional emphasis in order that they may not fail to produce their proper effect.] **Albert Bastian.** 'Quellen und Wirkungen von Jacob Böhme's Gottesbegriff.' [Böhme derived his natural philosophy directly from Paracelsus, his mystical pantheism indirectly from Eckehart and Nicolaus of Cusa.] Rezensionem, etc.

MIND ASSOCIATION.

THE Seventh Annual General Meeting of the Association was held on 2nd June last in University College, London. The Editor was empowered to enlarge numbers of the Review when occasion demanded. It was resolved that the general meeting next year be in Oxford in May or June. The following is the full list of the officers and members of the Association :—

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PSYCHOLOGY AND PHILOSOPHY

I.—ON TRUTH AND COPYING.

By F. H. Bradley.

Mr. Joachim in his interesting work on *The Nature of Truth* did, I think, well to discuss once more that view for which truth consists in copying reality. It is a view which for myself I have been accustomed to treat as exploded, but it is a natural way of taking things, and, I suppose, can never cease to be popular. And, since from time to time a discussion of this topic is likely to be useful, I will venture to offer some remarks on it here.

The idea that truth consists in mere copying is suggested from many sides. A man through language and ideas has to convey fact to other men, and how can he do this unless his ideas copy fact so far as the purpose requires? And, in dealing practically with the present or the future situation, unless I have mirrored in my mind the main features of that situation, how can I hope to succeed? And in recalling the past we are bound above all things not to alter it, and how can we avoid this unless in some way, however indirect, we produce a copy? Finally truth implies agreement amongst the ideas of separate individuals. And, since this agreement is not made by one or another individual, and so not by all of them, it therefore seems due to all of them following one original fact. But unless they mentally repeat this fact, how, it will be asked, can they follow it?

The above view is natural, but, even as it stands, seems hardly consistent with itself, for how the past or future can be copied is at least not evident. And it is soon in trouble, as is well known, with regard to the sensible properties of things.

But, not to dwell on this, the whole theory goes to wreck in principle and at once on a fatal objection. Truth has to copy facts, but on the other side the facts to be copied show already in their nature the work of truth-making. The merely given facts are in other words the imaginary creatures of false theory. They are manufactured by a mind which abstracts one aspect of the concrete known whole, and sets this abstracted aspect out by itself as a real thing. If on the other side we exaggerate when we maintain that all facts are inferences, yet undeniably much of given fact is inferential. And if we cannot demonstrate that every possible piece of fact is modified by apperception, the outstanding residue may at least perhaps be called insignificant.[1] Or (to put it from the other side) if there really is any datum, outward or inward, which, if you remove the work of the mind, would in its nature remain the same, yet at least there seems no way of our getting certainly to know of this. And, if truth is to copy fact, then truth at least seems to be in fact unattainable.

If the above objection cannot be met, and I do not know how it can be met, the theory in principle is ruined. In the end truth is not copying, but it is possible, while admitting this, to attempt to save the theory in a modified form. We may draw a distinction between perceptional and reflective thinking. As to what is perceived we may allow that we cannot argue that this is copied, but in any case, we may go on to urge, our ideas must copy our perceptions. And thus, after all, our secondary and reflective truth must seek to mirror reality. The position taken here is founded on a distinction which in itself is important, but for the purpose in hand seems wholly ineffectual. And apart from such difficulties as might once more be raised as to given facts which are past and future, we have only to apply this view in order to find it break down in our hands.

Disjunctive, negative, and hypothetical judgments cannot be taken as all false, and yet cannot fairly be made to conform to our one type of truth. And in general the moment we leave perceived facts and seek explanation—which after all is implied in the desire for truth—we find that we are moving away from the given. Universal and abstract truths are not given facts, nor do they merely reproduce the given, nor are they even confined to the limits of actual perception. And in the end when we come to general truth about the Universe, it seems impossible to regard this as transcribed from the

[1] I am not assuming here that we have no feelings so elementary as to be unmodified by apperception. I am pointing out that any assumption on the other side seems hazardous and could at any rate not extend far.

given Universe. Our truths in short can all of them in some sense be verified in fact, but, if you ask if they all are copied from fact, the answer must be different. And we are driven to admit that, at least when we pass from individual truths, our truth no longer represents fact but merely 'holds' or 'is valid'. And, asking what these phrases mean, we are forced to perceive that both truth and reality go beyond the perceived facts. The given facts in other words are not the whole of reality, while truth cannot be understood except in reference to this whole.[1]

We saw in the first place that given facts are even themselves not merely given, but already even in themselves contain truth. And secondly we have seen that, even if the perceived facts were given, truth cannot merely transcribe them. And, since truth goes beyond the given, it is impossible to understand how truth can copy reality. For, before the reality has been reached, there is no original to copy, and, when the reality has been attained, that attainment already is truth, and you cannot gain truth by transcribing it.

I will now break off the consideration of that view for which truth consists in copying fact, and will endeavour briefly to indicate a better way of resolving the problem. But I must begin by pointing out the main error which, if left unremoved, makes the problem insoluble. This error consists in the division of truth from knowledge and of knowledge from reality. The moment that truth, knowledge, and reality are taken as separate, there is no way in which consistently they can come or be forced together. And since on the other hand truth implies that they are somehow united, we have forthwith on our hands a contradiction in principle. And, according to the side from which the subject is approached, this contradiction works itself out into a fatal dilemma.

This defect in principle has been illustrated by the view we have been examining, and it may repay us to notice in a different case the result of the self-same error. An attempt is sometimes made to escape from difficulty by insisting that truth is merely what 'holds' or is what merely 'serves' or merely 'works'. But since these phrases are relative and, I presume, relative to something which is known, we have at once a division of truth from knowledge. On the one side is known reality, and on the other side is mere truth, and in short we have repeated the error of that view which took

[1] This is the main conclusion which was urged in my *Principles of Logic*. It did not occur to me that I should be taken there or anywhere else to be advocating the copy-theory of truth.

truth as a copy. And the fatal result of our proceeding soon becomes manifest.[1] Truth is merely to be that which subserves something else, and I am to know that this is so, and that this is so is true. But, if so, this truth about truth seems itself to go beyond truth, and our theory is dissolved in self-contradiction.

Let us consider this more in detail. We are, it seems, to take an end, such say as the abstraction of practical success or of felt pleasure, and we are to understand truth as a means, an external means, to this end. And what, we may hear, can be more plain and intelligible than this? It is, I agree, almost as clear as the former view for which truth merely copied things, and perhaps this suggestion may be an omen. But first let us ask as to our end, is this known or unknown? If it is unknown, how do we know that it is an end served by means? And, if it is known, then what are we going to say of *this* knowledge? Is it true? Can we discuss it? Have we got a truth about our end, and, if so, does 'about' mean no more than merely subserving? I do not myself know how these particular questions should be answered, but in general I cannot see how to defend truth which is external to knowledge or knowledge which is external to reality, and with this I must pass to another difficulty which attaches to the present view. Truth has been taken as being *merely* the means to an end, and we naturally understand this to say that truth is *really* the means. But here at once arises a well-known puzzle. The end, we all agree, in a sense dictates the means, but on the other hand the end, we are accustomed to think, must choose those means which are really possible. We are hence, given the end, in the habit of discussing the means. We have to consider in short about suggested means whether they are means really and in truth. But, with this, we seem to have knowledge and truth and reality, certainly all in relation with the one real end, but on the other side all external to it and apparently more or less independent of it. We started in other words by saying 'Truth is nothing beyond that which subserves,' and we have ended in explaining that 'Truth is that which in fact and in truth subserves'. And when in a given case a question is raised as to this fact and truth, it is answered apparently by appealing to something other than the end. Any such appeal obviously is inadmissible, but when we reject it, we seem now to have excluded all truth about our

[1] *Cf.* the note at the end of the article.

means, just as before we seemed to have no knowledge or any truth about our end.[1]

And a prescribed remedy, if I rightly understand, is to throw overboard all preconceived ideas as to truth and reality. Truth is merely the ideas which are felt in a certain way, and are felt to dominate in a mind or in a set of minds, and any further question as to their truth is senseless. You may indeed ask psychologically, if you please, how they have come to dominate, but, however they have come to dominate, their truth is the same. If you and I disagree we both so far have truth, and if you argue with me and persuade me, that is one way of agreement. But, if you prefer to knock me on the head, that, so far as truth goes, is the same thing, except that now there is truth not in two heads but one. And as to there being any other truth *about* all this state of things, or in short any truth at all beyond mere prevalence, the whole notion is ridiculous. And, if you deny this, you do but confirm it, since your denial (though of course true) must also be false, since it is true only because in fact it has prevailed. And if you want further proof, you can perhaps demonstrate all this by a downward deduction. For either this or the copy-theory must be the truth about truth, and as the copy-theory will not work, this by inevitable consequence remains as true. But there is no one, I think, who is ready apart from some reserve to accept the above result.

It would be easy, passing on, to point out how the same main error, appearing in other forms, works itself out from other sides into conflicting dilemmas. But the limits of this article compel me to proceed. The division of reality from knowledge and of knowledge from truth must in any form be abandoned. And the only way of exit from the maze is to accept the remaining alternative. Our one hope lies in taking courage to embrace the result that reality is not outside truth. The identity of truth knowledge and reality, whatever difficulty that may bring, must be taken as necessary and fundamental. Or at least we have been driven to choose between this and nothing.

Any such conclusion, I know, will on many sides be rejected

[1] One is, I presume, naturally led to avoid this difficulty by maintaining that our knowledge in the end is intuitive. We have, that is to say, an experience in which reality, truth, and knowledge are one. But, with this, there is an end at once and in principle of the view that truth is an external means to something else. And on our new ground the problem of Error, the question how we can hold for true what is false, obviously threatens to become pressing.

as monstrous. The last thing to which truth pretends, I shall hear, is actually to be, or even bodily to possess, the real. But though this question, I know, might well be argued at length, the issue in my judgment can be raised and can be settled briefly. Truth, it is contended, is not to be the same as reality. Well, if so, I presume that there is a difference between them. And this difference, I understand, is not to be contained in the truth. But, if this is so, then clearly to my mind the truth must so far be defective. How, I ask, is the truth about reality to be less or more than reality without so far ceasing to be the truth? The only answer, so far as I see, is this, that reality has something which is not a possible content of truth. But here arises forthwith the dilemma which ruined us before. If such an outstanding element is known, then so far we have knowledge and truth, while, if it is not known, then I do not know of it, and to me it is nothing. On the one hand to divide truth from knowledge seems impossible, and on the other hand to go beyond knowledge seems meaningless.

And, if we are to advance, we must accept once for all the identification of truth with reality. I do not say that we are to conclude that there is to be in no sense any difference between them. But we must, without raising doubts and without looking backwards, follow the guidance of our new principle. We must, that is, accept the claim of truth not to be judged from the outside. We must unhesitatingly assert that truth, if it were satisfied itself, and if for itself it were perfect, would be itself in the fullest sense the entire and absolute Universe. And agreeing to the uttermost in this claim made by truth, we must attempt, truth and ourselves together, to judge truth from its own standard.

I will endeavour first to point out briefly in what this standard consists. The end of truth is to be and to possess reality in an ideal form. This means first that truth must include without residue the entirety of what is in any sense given, and it means next that truth is bound to include this intelligibly. Truth is not satisfied until we have all the facts, and until we understand perfectly what we have. And we do not understand perfectly the given material until we have it all together harmoniously, in such a way, that is, that we are not impelled to strive for another and a better way of holding it together. Truth is not satisfied, in other words, until it is all-containing and one. We are not obliged here, I think, to inquire further how these aspects of the idea of system are related, and whether, and in what sense, they have their root in a single principle. It is sufficient here to

insist that both aspects[1] are essential to truth, and that any theory which ends in dividing them is certainly false.

But, when we judge truth by its own standard, truth evidently fails. And it fails in two ways, the connexion between which I will not here discuss. (i.) In the first place its contents cannot be made intelligible throughout and entirely. A doubt may indeed be raised whether even in any part they are able wholly to satisfy, but this again is a question on which here it is unnecessary to enter. For in any case obviously a large mass of the facts remains in the end inexplicable. You have perpetually to repeat that things are so, though you do not fully understand how or why, and when on the other hand you cannot perceive that no how or why is wanted. You are left in short with brute conjunctions where you seek for connexions, and where this need for connexions seems part of your nature. (ii.) And, failing thus, truth fails again to include all the given facts, and any such complete inclusion seems even to be in principle unattainable. (*a*) On the one hand the moment's felt immediacy remains for ever outstanding, and, if we feel this nowhere else, we realise at each moment the difference between the knower and his truth. (*b*) And on the other hand the facts before us in space and time remain always incomplete. How is it possible for truth to embrace the whole sensible past and future? Truth might understand them (do you say?) and so include them *ideally*. Well but, if truth could do as much as this, which I myself think not possible, truth after all would not include these facts *bodily*. The ideal fact after all and the sensible fact will still differ, and this difference left outside condemns truth even as ideal. And in short we are entangled once more in our old dilemma. We have an element given which in no way we can get inside the truth, while on the other side, if we leave it out, truth becomes defective. For there seems really no sense in endeavouring to maintain that what remains outside is irrelevant.

With this at first sight we have ended in bankruptcy, but perhaps we may find that the case is otherwise and that our failure has carried us to success. For we were looking for the connexion between truth and reality, and we discovered first that no external connexion is possible. We then resolved to

[1] We may use a variety of phrases here. We may speak, for instance, of homogeneity and specification, or again of integration and differentiation. The main point is this that truth must leave nothing outside, and, with regard to what it contains, must not have to ask for further explanation as to how one part stands to another part.

take truth as being the same with reality, and we found that, taken so, truth came short of its end. But in this very point of failure, after all, lies the way to success. Truth came short because, and so far as, it could not become that which it desired to be and made sure that it was. Truth claimed identity with an individual and all-inclusive whole. But such a whole, when we examine it, we find itself to be the Universe and all reality. And when we had to see how truth fails, as truth, in attaining its own end, we were being shown the very features of difference between truth and reality. And in passing over into reality and in thus ceasing to be mere truth, truth does not pass beyond its own end nor does it fail to realise itself. Hence being the same as reality, and at the same time different from reality, truth is thus able itself to apprehend its identity and difference. But, if this is so, we seem to have reached the solution of our problem.[1]

Truth is the whole Universe realising itself in one aspect. This way of realisation is one-sided, and it is a way not in the end satisfying even its own demands but felt itself to be incomplete. On the other hand the completion of truth itself is seen to lead to an all-inclusive reality, which reality is not outside truth. For it is the whole Universe which, immanent throughout, realises and seeks itself in truth. This is the end to which truth leads and points and without which it is not satisfied. And those aspects in which truth for itself is defective, are precisely those which make the difference between truth and reality. Here, I would urge, is the one road of exit from disastrous circles and from interminable dilemmas. For on the one side we have a difference between truth and reality, while on the other side this difference only carries out truth. It consists in no more than that which truth seeks itself internally to be and to possess.

[1] On the whole question see my *Appearance*. From this basis we can deal with the difficulty as to truth's being able consistently to pronounce itself imperfect. The dilemma, that arises here, was noticed by me (p. 513) and solved by a distinction (pp. 544-547). On this a sceptical critic (in MIND, No. 11, p. 336), seizing his opportunity, urged against me this dilemma which I had noticed, forgetting to mention that I had noticed it, and omitting the fact that, having noticed it, I had offered a solution. This opportunity for criticism I confess that I had not observed, but in the second edition of my book, desiring always, so far as I can, to be of use to all the world, I called attention to this opening, more or less by way, if I may say so, of invitation (p. 620). And this standing invitation, I was going to add, has been lately accepted by Captain Knox, in MIND, No. 54, p. 212. But in view of this writer's extensive ignorance of the work which he came forward to criticise (see MIND, No. 55), I can hardly suppose that such an assertion would be justified. Still, if I cannot credit myself here with a successful invitation, I think that at least I may lay claim to a true prophecy.

Truth, we thus can say, at once is and is not reality, and we have found that the difference is not external to truth. For truth would be satisfied in its own self-sought completion, and that completion would be reality. And if you ask how truth after all stands to reality, and whether after all truth is not a copy, the answer is obvious. Apart from its aspect of truth the reality would not be the reality, and there surely is no meaning in a copy which makes its original. In truth and in other aspects of the Universe we find onesidedness and defect, and we may go on to see that everywhere the remedy for defect lies in the inclusion of other aspects more or less left out. But as for comparing the Universe, as it is apart from one aspect, with the Universe as complete, such a comparison is out of our power. And it is even, when we reflect, ridiculous to seek to discover by thinking what the Universe would be like without thought. You cannot take reality to pieces and then see how once more it can be combined to make reality. And thus, if we are asked for the relation of truth to reality, we must reply that in the end there is no relation, since in the end there are no separate terms. All that we can say is that, in order for truth to complete itself into reality, such and such defects in truth itself would have to be rectified.

That there are difficulties in the way of this solution I readily admit,[1] but difficulties and impossibilities, I urge, are not the same thing. And any other exit from our maze is, I submit, closed impassably. On the one hand we must not use words that have no positive sense, and, with this, all reality that falls outside experience and knowledge is, to my mind, excluded. On the other hand we cannot rest in that which, when you try to think it, conflicts with itself internally, and is dissolved in dilemmas. But, in order to know that the Universe is a whole with such and such a general nature, it is not necessary to perceive and to understand how such a Universe is possible, and how its various aspects are held apart and together. We desire to know this, I agree, but I fail myself to see how we can, and I think that with less than this we can gain positive knowledge enough to save us from mere scepticism.[2]

[1] On this whole matter see my *Appearance*. One difficulty, on which stress has been rightly laid, is that we have no direct experience of any total experience which comprises in itself finite centres. I do not however myself see that this is more than a difficulty.

[2] By scepticism I of course do not mean any positive view as to knowledge in general, and still less any kind of conclusion supported by proof. I mean by it denial or doubt with regard to the existence *de facto* for me, of that which satisfies intellectually. This denial or doubt rests certainly

If we now return to that view for which truth is a mere copy of things, we have seen that in the end no such doctrine is admissible. But from a lower point of view it may be convenient to speak of truth as corresponding with reality and as even reproducing facts. In the first place the individual in truth-seeking must subject himself. He must (I cannot attempt to explain this here) suppress ideas, wishes and fancies, and anything else in his nature which is irrelevant to and interferes with the process of truth-seeking. And hence in a sense the individuals can have something in common, correspondence to which is essential for truth. Secondly in truth-seeking the individual (once again I cannot try to explain this) must follow the object. Our understanding has to co-operate in the ideal development of reality, and it has not, like will, to turn ideas into existences. And thus following the object the ideas of the individual in a sense must conform to it.[1] In the third

on a positive basis, but, so long as the basis is not made explicit and the denial remains particular, the basis itself is not denied, and the position remains consistent. On the other hand the scepticism which itself poses as a doctrine, which deals in general truth, and in a word claims to be *de jure*, to my mind does not understand itself. No consistent scepticism can, in my opinion, offer a reasoned proof of itself, nor can a consistent scepticism maintain any general positive doctrine, or indeed any universal thesis of any kind whatever.

[1] So far as concerns "the suppression of the subjective," as it is sometimes called, that of course belongs alike to everything serious in life. In this general respect there is no difference between the pursuits of truth beauty and moral goodness. When, in order to create a work of art, a man has to keep down (so far as is necessary) what is merely particular to himself, that does not mean either that the work of art makes itself without him, or that it is not different because he in particular has made it. So also in the process of the will for good. When that is called "objective," the meaning is not that the individual's will makes no difference. The meaning is that whatever in him is irrelevant to the issue, is suppressed as *merely* "subjective". So again in truth-seeking. The ideal development of the object itself, which I follow, does not make itself. In the first place apart from individual minds there is no object anywhere. In the second place, so far as I in particular am concerned, the process of truth demands my personal self-realisation. If you took that away, the objective process would not exist in me at all, and, more than that, its nature would to some extent be modified by my personal failure. On the other side the "objective" development cannot possibly take up into itself then and there everything that is at the moment psychically present in myself when I seek truth. It calls therefore for the suppression, so far as is required, of whatever in me falls outside of and is irrelevant to this special development.

Any reader who wishes not to criticise but to understand, must try to bear in mind two things. (i.) The suppression of "the subjective" takes place in regard to truth beauty and goodness alike, and not more in regard to one than the others. (ii.) The merely "subjective" does *not* mean what is personal. It means that which for the special purpose in hand is irrelevant and in this sense is *merely* personal (see *Appearance*, p. 237). On the other hand the reader who wishes simply to criticise will, I think, find no difficulty so long as the above points are ignored.

place reflexion, as we have seen, must take up sensible qualities as given matter, and it must accept also more or less brute conjunctions of fact. Intelligence of itself does not recreate the given past nor does it procreate entirely the given present or future. And it may be said to wait on and to follow a course of events which it is powerless to make. And finally to some extent language and truth must seek even to copy perceived facts, and, as we saw, to convey them faithfully, though of course in a partial manner. In the above senses truth may be spoken of as corresponding to facts, and it is right and proper as against one-sided theories to insist on this correspondence.[1] But, as we have seen, such a way of speaking is not permissible in the end.

I will ask finally how what we may call the copy-theory of truth is affected by the connexion between thought and volition. That in some sense thought depends on desire and will is even obvious, and it is a doctrine in which most of us, perhaps, have, we may say, been brought up. But it is a doctrine on the other hand which can be interpreted in various ways. If in the first place truth is made wholly to depend in its essence on the individual's desire, then in this case, naturally, since truth itself goes, the copy-theory of truth goes also, together with every other sane theory of truth. But otherwise, if you simply take truth to be copying, the desire for truth will be a desire for copying, and by laying emphasis on the aspect of desire I do not see that you add anything.

Further if you adopt a one-sided intellectual view, and maintain that reality is an original system of thought which you try to rethink, or a world of ideal essences whose presence you desire—it seems useless in such a case to speak about copying, since copying is excluded. There may be an original here, but, whatever else you are doing, you do not copy that original, since obviously you have no original before you to copy. The realisation in detail of a general end is clearly in itself not repetition, and on the other side, as clearly, repetition and reproduction cannot all be called copying. Hence to ask here why we should desire to copy, is obviously irrelevant. The rational question to ask is about our desire for reproduction and repetition or for the presence in or to our minds of a self-existent reality.

[1] This I myself did in MIND, N. S., No. 51. I did not refer here to the fact that I had written elsewhere on the nature of truth, but I took care to warn the reader (p. 311) that I could not in that article attempt to point out the meaning of truth and falsehood. Notwithstanding this my article has literally been taken as a statement of my view as to the ultimate nature of truth.

But, if we adopt a more concrete view, all such questions become idle. On such a view my desire and my will to have truth is the will and the desire of the world to become truth in me. Truth is a mode of the self-realisation of myself and of the Universe in one. And if you ask why the full reality cares to spill itself into gratuitous vessels, or whence and why to me comes this mania for turning myself into a superfluous receptacle or instance—the answer is ready. Such inquiries are based on and betray a most stupendous misconception. The Universe is nowhere but in the lives of the individuals, and, whether as truth or otherwise, the Universe realises itself not at all except in their differences. And on the other side the individuals, if they are to realise themselves personally, must specialise this common life of which truth is one aspect. And to suppose that the individuals can seek their end and their reality somehow apart (say in the abstraction of mere practice or of private pleasure) is in the end really meaningless. Thus truth, the same in all, is from the other side not wholly the same, since difference to it is vital and it gains difference in each. The personal diversity of the individuals is hence not superfluous but essential. For viewed from one side this diversity brings with it fresh quality, and from the other side, even so far as truth is common to the individuals, it must be taken none the less as modified in each case by its fresh context. But I must hasten here to add that no such general doctrine can be verified in detail.

The process of knowledge is, on any view like this, not something apart and by itself. It is one aspect of the life of the undivided Universe outside of which life there is no truth or reality. And to speak here of copying as in a mirror, we may once more repeat, is absurd. If you like to add that the absurdity is heightened when we remember that life in general, and knowledge in particular, imply will and desire, to this naturally I make no objection. But for myself I have always been contented to know that the whole suggestion of copying is here ridiculously irrelevant. Still as according to some critics my destiny is to illustrate what they call "intellectualism," this article, if I could understand it, is doubtless a blind flutter against the limits of my cage.

Note to page 168.—Compare here MIND, N.S., No. 51, p. 323, and again Höffding, *Problems of Philosophy*, pp. 79 foll. (Eng. trans.), a passage the force of which, it seems to me, Prof. James fails to appreciate. I may perhaps use this opportunity to say something with regard to points really or apparently at issue between Prof. James and myself. I cannot under-

take to criticise Prof. James's ultimate view as to truth knowledge and reality, because that is accessible nowhere, I believe, except in more or less occasional and fragmentary articles, and I do not think that justice can be done to it until it is put out in a more complete and systematic form. But it has been a relief to me to see that, as I understand him, Prof. James rejects the idea that the essence of truth consists in nothing but its mere practical results. In accepting the standard of clearness and inclusiveness and self-consistency (MIND, N.S., No. 52), Prof. James apparently adopts the view in which I at least was brought up, a view for which of course the notion of any external standard of truth was an exploded fallacy. This explanation on the part of Prof. James seems to me to have removed wholly one supposed point of disagreement.

Next as to "working," I of course agree that in proportion as a truth is idle it is less true, and I again agree that in the end no truth can be wholly idle. A truth that makes no difference to truth is to my mind an impossibility. But I cannot agree that, wherever we fail to see this further difference, it is non-existent, and the alleged truth therefore not true at all. It is one thing to say that, so far as we perceive, such or such a truth has no importance, and to act accordingly, and it is surely another thing to insist that such a truth has no truth whatever. And I seem in passing to remember that Hegel, rightly or wrongly, incurred censure for an attitude more or less of this kind towards some facts or truths of natural science. Next I agree that in the end all truth has practical and again æsthetic consequences. I believe in a word in the implication of all aspects of reality with one another. But once more I cannot believe that we can see this implication in detail, so as everywhere to use the consequence (whatever consequence it is) as a criterion. And to my mind it would be senseless to allege that the several aspects of the whole are each nothing but their consequences. Further I have no objection to identifying reality with goodness or satisfaction, so long as it is clear that this does not mean mere practical or any other one-sided satisfaction. Again I agree that any idea which in any way "works," has in some sense truth. Only to my mind it has not on this account ultimate truth. It need not be a way of expression which gives a theoretical satisfaction in which we can rest. In the sciences we use working ideas and convenient mythology, and, while not admitting that these have ultimate truth, I should think it absurd to deny to them truth altogether. And surely so it may be again with morality

and religion. The ideas that are really here required, most certainly, I should say, must be true. But to conclude from this that they have ultimate truth for metaphysics is to my mind irrational. And if you ask what I am to say then when these truths are contradicted by metaphysics, I reply that in my opinion they are not so contradicted, though certainly in my opinion metaphysics must understand them otherwise. If however any one believes in this contradiction, he should in my judgment on no account sacrifice or subordinate his practical truths, though as certainly he should not offer them as the sole and final truth about the Universe. But nothing, I fear, that I can say is likely to shake the pernicious prejudice that what is wanted for working purposes is the last theoretical truth about things (see my *Appearance*, p. 451 and elsewhere). This prejudice tends everywhere to result in one-sided attempts at consistency. In our moral practice, for instance, there evidently in fact is involved some element of uncertainty as to the issue. Hence on this point the Christian religion, clinging to the concrete whole, on one side maintains this element of moral struggle, but on the other side completes it (inconsistently no doubt) with an assurance of final victory. And here from both sides comes a protest, and a one-sided cry for clearness and consequence. Unless really, and as an ultimate fact, there is an uncertain future, morality, we hear, is destroyed. God therefore, to save morality, must be made sufficiently ignorant and sufficiently weak for the future really to be doubtful. And apparently it is not seen that, with this, there is an end logically of all that is meant (and much is meant) by "the peace of God". Again, on the same principle but from the other side, some fanatic from time to time insists on the utter supremacy of Good. And hence he concludes in the older style that morality is irrelevant and worthless, or to-day in a newer mode that the individual, as such, is perfect, and that there is no toothache but ignorance. But for practical purposes surely there is something higher than theoretical consistency, even if such consistency in practice were actually attainable. Hence, unless ultimate theoretical truth itself may be inconsistent, it is better for practice surely not to identify our working ideas with ultimate truth. For practice you want ideas which keep hold of all sides of the main substance, and to sacrifice any part of that substance to theoretical consistency is practical error. But on the other hand the reader must be warned that to agree with us here is to incur the peril, whatever that is, of being called an "Intellectualist".

To come now to that which Prof. James would call

"humanism," I am reminded forthwith that an accusation of mere humanism was one of the charges long ago brought against German Idealism. And since (if I may speak for myself) I do not believe in any reality outside of and apart from the totality of finite mind, and since there is certainly nothing original in my disbeliefs or beliefs, once more here I fail to perceive the chasm which separates the new "humanism" from what went before. And I am again relieved to find that on the whole Prof. James himself takes this view, and regrets an attitude of hostile criticism on our side as due largely to mistake. Prof. James doubtless here does not remember that on our side nothing was said until we found ourselves judged and sentenced. The philosophic world, ostensibly in Prof. James's behalf, was divided into sheep and goats, and the trumpet was blown, and Plato and Aristotle summoned from the dead to witness the triumph of the one philosopher and the confusion of the sophists. But for my part I have no wish to recall such extravagances, if Prof. James will not forget that it was his fortune, however ill-merited, to inspire them. And if I can do anything to remove or to throw light on any issue between Prof. James and those who cannot follow him, it will be a pleasure to me to attempt this.

(1) In the first place as to "pragmatism," we want to hear definitely from Prof. James whether the practical side of our nature is to be made supreme, or whether there is anything else which has value and rights of its own. Even now I ask myself in what sense, or whether at all, mutilation is advocated. I still do not know if I am called on to enter into life halt and maimed, to say nothing of being blind of one eye. And a reassuring statement in general terms is, I think, not sufficient. But if Prof. James would explain to us how in the end he understands the human Good, and how its elements are related to one another, this point perhaps would become clear. We might at last know whether we all should or should not call ourselves Pragmatists. (2) Next as to "humanism," surely we should be informed, first, whether "finite mind" is to stand merely for some of the inhabitants of a single planet, or is to have a far wider meaning, and, if the latter, we should be told what that meaning is. This is not a new question (it might even be called an old and familiar one), and in some aspects the difference here between various views may be really enormous. It seems to myself at least imperative that such a point should not be left in darkness. And (3) in the process of Humanity (however Humanity is understood) we have to inquire how the indi-

viduals stand to the whole. Have both sides of the process equal reality, or, if this is not so, what is the alternative? If the individuals are the final realities, what in the end are we to say of the "together" and of the whole process? These are well-known problems, and they surely call for systematic treatment. (4) Then, to say nothing of questions about knowledge—a subject with which Prof. James has in some degree dealt—what in the end is the meaning of and the truth about Progress? Endless progress as an ideal is itself hardly above criticism, but is there in the end any meaning in progress at all? Is mere prevalence and survival to be the same as progress, and, if not that, then what else is progress to mean? And is the temporal process of the Universe (which process is apparently the one reality) to be taken as a progress, and if so, on what grounds? We have once more here an old problem which calls for solution. (5) Finally I need perhaps say nothing as to the difficulty with regard to "a condition" outside of finite minds, except to point out that any obscurity on this head must naturally affect the entire view.

The above questions, and others, can hardly be answered satisfactorily unless they are dealt with all together and as connected parts of one inquiry. Prof. James's answer to them, when it comes, will not altogether, I imagine, meet all our difficulties, but most assuredly it will be welcome. Even at Oxford we have not yet been so deafened by periodical manifestoes and by prophetic outcries as to be incapable of hearing. And there, as indeed everywhere else, Prof. James may count upon willing and respectful attention.

II.—AN 'ECONOMIC' THEORY OF SPATIAL PERCEPTION.

By C. Spearman.

I.—Weakness of the Usual 'Empirical' Theories.

Every human sensation, whether it be a pin-prick or a redness or a noise or of any other kind, always has a spatial value, a particular 'thereness'; even the general feeling of indisposition seems to be, however vaguely, 'here'. But man, we can scarcely doubt, has very slowly and gradually evolved out of a mere speck of protoplasm. Hence, his present spatial values are likely to be—to some extent—explicable by his history.

The idea of the evolution of the sensorial spatial values is, of course, anything but new; it became familiar, indeed, some time before the idea of man's evolution in general. But this very fact seems to have had an unfortunate influence; the authors who have followed up Berkeley's attempt to trace out the genesis of spatial perception seem to have had difficulty in freeing themselves from his original pre-Darwinian standpoint. Although differing widely from one another on every matter of detail, they have almost unanimously continued to seek for the genesis in the lifetime of individuals, or at any rate in that of mankind. Also, they have generally persisted in regarding the space of sight—principally, it would seem, because it lies outside the body and because it derives from inverted retinal images—as a peculiarly artificial product. The original space they have declared to be that of touch.[1] More recently, they have settled upon one particular kind of tactual sensation as being pre-eminently fundamental, namely, the so-called 'movement-sensations' that occur on changing the position of a limb.

But all this 'empirical' theory is daily showing itself to fit worse and worse the hard actual facts. This has been most conspicuous, perhaps, with regard to sight. For in-

[1] This term will throughout this paper be used in its broadest sense, so as to include pressure, pain, heat, cold, etc.

stance, the cases of removal of congenital cataract, long supposed to be conclusive on the side of empiricism, have at last had to be admitted even by the leading empiricists themselves to furnish very little serious evidence either way.[1] On the other hand, a much more crucial test has been devised ; in this, the retina of persons totally blind from birth is stimulated mechanically, by pressing the point of a stick against one side of the eyeball ; the whole previous experience of such persons should make them localise the ensuing visual sensation near the stick ; but actually, they localise them on the opposite side of the eye, just as demanded by the anti-empirical or 'nativistic' theory.[2] In short, though the nativists have, indeed, failed to prove that each visual fibre possesses absolutely unchangeable spatial values, they have succeeded in showing that the normal changes are at any rate surprisingly small.

The question has been much less exhaustively investigated with regard to the localisation of touch. But two previous papers of the present writer are believed to have shown that this, far from being the primitive element of sensorial space, is just as much a complicated artificial product as is visual localisation.[3] By means of experiment in normal and pathological cases, it was proved that the simple 'thereness' of a tactual sensation must be referred to the combined action of many factors of two distinct kinds. There are 'segmental' factors, whereby the skin informs the brain of the relative positions of all stimuli in the region between any two neighbouring joints. And there are 'articular' factors, whereby the joints intimate to the brain their angle (or any changes thereof). These factors—forming, as it were, a system of polar co-ordinates—conjointly determine the localisation. In consciousness appears the net result, a simple impression of 'thereness'.

Nor, finally, does the empirical school seem to have been much happier in picking out the 'movement-sensations' as the pre-eminently fundamental element. The ordinary per-

[1] It is recognised nowadays that even the most unquestionably innate faculties do not attain efficiency without a little exercise, that such exercise is doubly wanted for any faculty that has been unnaturally kept ont of use until late in life, that the eye is an organ peculiarly susceptible to 'psychical' derangement by abnormal habitus, that any derangement is temporarily aggravated by the shock of a surgical operation, and that the investigation of the patient is much hampered by medical considerations and has never yet been achieved in a quite satisfactory manner.

[2] Schlodtmann, *Archiv für Ophthalmologie*, 54, 1902, p. 256.

[3] *British Journal of Psychology*, 1905, i., p. 286 ; Wundt's *Psychologische Studien*, 1906, i., p. 387.

ception of movement is nothing more than a perception of change of tactual place; consequently, it is, like the perception of tactual place itself, merely a resultant from many more elementary factors (segmental and articular).[1] True enough, when the skin has been completely numbed (by faradic electricity), a physical movement of the joint will still suffice to engender a vague perception of movement;[2] and this perception appears to be no compound resultant, but the quite simple effect of an articular factor alone. Such a perception, however, is only of movement in general, not of any particular direction; the absence of the segmental factor seems to take away just the differentiation in three dimensions absolutely indispensable for complete localisation; no mere consciousness of movement in general can ever account for that of movement in any particular direction, and still less for perception of any particular place. Moreover, there is no reason whatever to suppose that the articular factors are any more primitive than the segmental ones. In fact, I believe to have given valid psychological reasons for believing just the contrary.[3] And anatomical considerations point the same way; for although the exact site of the physiological organ of the articular factor is still disputable, it is certainly connected with the joint or adjacent tendons, that is to say, with structures confined to a comparatively small and advanced class of animals.

II.—Original Identity of Psychical and Physiological Space.

All these unsatisfactory results of the usual empirical theories appear to justify an attempt to explain the evolution in a new manner. The present paper endeavours to achieve this by a further step along the same line as pursued by the two previous papers. The latter showed both the articular and segmental factors to be derivatives—in various stages of evolution—from a more simple spatial cognition akin to the *Raumsinn* tested by Weber (and most clearly defined, perhaps, by Aubert and Kammler); these factors have only undergone

[1] The movement is, indeed, perceived much more distinctly than the positions between which the movement occurs. But this fact is merely an instance of the general law (easily verified tachistoscopically), that a change is cognised more readily than the states between which the change happens. As Külpe first showed, the more general perception precedes the more specific one (*Grundriss d. Psychologie*, pp. 178, 360; Wundt's *Phil. Stud.*, viii., p. 318).

[2] Goldscheider, *Zeitschrift f. Klin. Medicin*, xv., pp. 98, 111.

[3] *Brit. J. Psych.*, 1905, i., p. 309.

the usual effect of long habit, in that they have become mechanical and, at last, unconscious. But such explanation (as was admitted) does not get beyond "the most recent chapter" of genesis. It shows how nature has got over the difficulty of localising in a body possessing flexible joints, but it ignores a much more fundamental difficulty, that of localising on the bodily surface at all, when there is overwhelming evidence that the real sentient function is confined to the brain. A person who has lost an arm, for instance, can feel it again as vividly as ever, if the stump of the nerve be stimulated artificially; hallucinations of sight continue to occur after complete destruction of the eyeballs, but never after that of the occipital cortex. *A priori* then, one would have expected, say, the pain of a gouty foot to feel to be on the mesial surface of the first frontal convolution (accepting this view of the disputed topography, to fix our ideas); any accompanying articular factors should merely add some more sensations localised behind the Rolandic fissure. Why does not this occur? *Why have not the sensorial and the underlying physiological occurrences identical spatial values?*

Curiously enough, this discrepancy between sensorial and physiological space has rarely excited much interest. Even such a thorough partisan of physiological psychology as Bain, for example, does not appear so much as to allude to it. Possibly, psychologists think that such a minor discrepancy is not worth attention in view of all the other infinitely deeper differences between the two mysteriously parallel processes of mind and body. But, surely, the very fact of the spatial discrepancy being so unessential ought rather to encourage us to look for the cause. That excitations in any particular physiological site should invariably engender sensations in another particular but quite different psychical site, must have some intelligible reason; we cannot for ever be contented with tacitly assuming a 'pre-established harmony'. Above all, the profound analogy of Space with Time declares convincingly that the spatial discrepancy cannot be original; we are impelled to believe that, just as every sensorial and its co-ordinated physiological event occur at one and the same moment, so in the beginning they must have occurred at one and the same place.

The proof of this thesis, that sensorial and physiological space must have coincided originally, falls naturally into two parts. Sensorial localisation must be shown: firstly, to be capable generally of shifting away from any primitive site; and secondly, to have special reason for shifting to exactly the position where we now find it.

The former task seems to have been amply fulfilled by experimental psychology; for it has been proved to the hilt that every sort and description of sensorial localisation is changeable. As regards visual sensation, the epoch-making researches of Wheatstone demonstrated that the distinctness of binocular vision is essentially due to a slight alteration in the apparent direction of the non-foveal rays.[1] And recently it has been discovered, that under certain pathological circumstances the retinal elements can learn to localise in an entirely new direction, sometimes even in the new and the old directions simultaneously.[2] With respect to touch, the instability of localisation is even less questionable. To take an instance from one of the papers mentioned above, it has been found that if a person concentrates his mind upon the apparent place of a tactual sensation, this place gradually wanders (up to as much as 15 cm. and more) away from its physiological site;[3] on his relaxing his attention, the sensation springs back towards (but not quite up to) its physiological site again. And the mutability of the spatial relations between one sense and another has been demonstrated with especial brilliance by Stratton's experiment of wearing glasses that turned the visual field upside down; in a few days the visual and tactual sensations and memories began to harmonise again and everything to seem as natural as before.[4]

Less easy is the second task. We have to show that sensorial localisation has some paramount reason for seeking exactly the site now actually occupied. The solution is, I believe, that the present site confers upon the localisation the greatest simplicity compatible with efficiency, or the *greatest possible mental economy*.

Before going further, it seems advisable to see how much is implied by this limit to the simplifying process, that it should be "compatible with efficiency" (without some such limit, the

[1] Excepting, of course, rays from points lying on the horopter. Wheatstone's statement, that two non-corresponding retinal points could blend into single vision has long found almost universal acceptance. His further assertion, that inversely two corresponding points can (normally) give double vision is still mostly denied, but some experiments (which I hope to publish soon) seem to put this also beyond doubt.

[2] See the researches of Kries, Javal, Bielschowsky, Hering and Tschermak, but on the other side Schoen, *Zeitschrift für Psychologie*, 35, p. 134.

[3] This wandering occurs in a constant direction, namely, towards the position that the physiological site of the touch would reach, if the joints of the limb in question were brought to their most usual angle. It is an example of Wundt's important law of *Angleichung*. (Naturally enough, the phenomenon can only be observed satisfactorily under exact experimental conditions. Wundt's *Phil. Studien*, 1906, i., p. 469.)

[4] *Psychological Review*, iii., p. 611.

greatest simplification would be to abolish sensorial space altogether). What is the *use* of sensorial space? It can scarcely be other than to enable animals to control the physical spatial relations between their bodies and their environment. For this purpose, it is by no means needful that the two kinds of space, sensorial and physical, should coincide, nor even that they should be of the same essential nature. In political economy, for example, we find gold to be the basis of barter (in the chief commercial countries), while paper would be impracticable as a basis; yet all the transactions in gold can be perfectly regulated by thoughts of and transactions in paper (in the form of cheques, notes, etc.). The one necessary and sufficient condition of effective symbolisation is that the symbolising values be unequivocally co-ordinated to those symbolised. Now, if sensorial localisation were to be simplified beyond a certain limit, a single sensorial spatial value would have to be co-ordinated to several different physical ones; unequivocality, and with it efficiency, would be lost.

This consideration shows further, that our opposition between the sensorial and the physical spaces does not necessarily involve 'realism'. As far as our present argument is concerned, physical space might be hyperbolical, spherical, or discrete, though perhaps not very well four-dimensional. It might even be a pure fiction, without involving any fresh difficulties beyond those already attaching to this view for other reasons; in such a case the physical spatiality here alluded to would only mean the sensorial spatiality of the event in question for any minds *other* than the one principally concerned. Physiological spatial relations are, of course, merely the physical ones between different parts of the body.

III.—Mental Economy and Tactual Localisation.

To turn to our second and chief task, let us conceive sensorial space as still in primitive coincidence with physiological space, and see what changes are then prescribed by mental economy. The discussion of the very earliest stages of spatial perception must be reserved for another occasion, as they are not essential to our present theme and would seriously distract attention from it. We will take for granted the eventual occurrence of a stage of development—it would seem to be that of a great part of the existent animal world—where no nervous system has been evolved and no dislocation of sensorial from physiological spatial values has yet occurred, but where nevertheless the animal is already able to move about and orient itself in its environment. Further, as a

corollary from the power of orientation, we will also assume that the localisation of such an animal's remembrances is of a different character to that of its actual sensations; while the latter is fixed relatively to the body,[1] namely, at the particular portion of bodily substance excited, the former is by some means or other fixed relatively to the environment, namely, at the place occupied by the excited substance during the actual excitation. At this stage of evolution, the orienting process may perhaps, without pretending an actual description, be symbolised adequately for our present purposes as follows: whenever the animal reapproaches, say, a foreign object against which it has formerly collided, the spatial value of its spontaneous sensations begins to approximate to that of the remembrances of collision; hence, the animal foresees a new collision and can act appropriately (going on if the collision was pleasant, and *vice versa*). No more simple orientation is conceivable.[2]

Let us next turn to a more advanced stage. We will first consider the case of some rudimentary species of Vorticella. Such an animal looks very like a plant; there is a long stalk, whose bottom end is permanently fixed to the ground or elsewhere, while the body proper sways about at the top end. It is evident that the lines of movement of such an animal must, in general, radiate from one common centre. When the body swings out along any line from this centre it will collide with any foreign object[3] that happens to lie in that line, say, at the place F. The collision will be suffered by the animal's periphery, the tips of its ciliæ. Now, we will conceive, for the sake of the argument, that these ciliæ have so exclusively adapted themselves to the purposes of collision, as to have sacrificed their power of sentience; they have turned, we will suppose, into mere 'receiving apparatus' for suffering the first shock of collision, modifying it and conducting it on towards the interior really sentient substance, or 'medulla'. Then, the collision will not be felt where it

[1] This objectively relational aspect has nothing to do with 'relative localisation' in a psychological sense; by the latter expression is meant the feat of orienting with regard to the body, judging, for instance, whether a touch be on the second or third toe (German, *Ortssinn*). All mere 'thereness' is, psychologically, not relative but 'absolute localisation' (German, *Lagewahrnehmung*).

[2] Such a disparateness of sensorial and memorative localisation is a phenomenon quite distinct from the discrepancy of sensorial and physiological values. The former, though not the latter, occurs in the case of Time also: an actual sensation has the temporal value of 'nowness'; but its subsequent remembrance has instead a 'thenness'.

[3] For simplicity, we will throughout suppose our 'foreign objects' to be stationary and very small.

occurs physically, at F, but in some particle of the sentient medulla situated at the moment of collision, say, at S. Yet this S, the place where the sensation is localised, though no longer coinciding with the physical place of the collision, F, is nevertheless still perfectly co-ordinated to the latter. For, as the animal always approaches any particular object in one and the same direction (namely, from its central position), its sentient medulla always has at the moment of collision one and the same place; the remembrances of collision with any object, say, F_k, are always distinguished by the same spatial value, S_k; and whenever the spatial value of its spontaneous sensations begins also to near S_k, the animal foresees a new collision with object in question. Its orientation is just as simple as that of the less differentiated animals whose bodies are still sentient throughout. Under these hypothetical conditions, then, there is no reason for any dislocation of sensorial from physiological space; our animal may perfectly well go on localising its tactual sensations in the organ sentient, although the collisions really occur elsewhere.

But such conditions rarely, if ever, hold good actually. As a general rule, an animal will be able to approach a foreign object from any direction; and each direction will bring the organ of sentience at the moment of collision to a new place; such a place, clearly, may lie anywhere on the circle whose centre is the foreign object and whose radius is the distance from the 'receiving apparatus' to the sentient organ. Let the possible directions be called D_1, D_2, D_3, . . . D_∞, and the corresponding places on the circle be S_1, S_2, S_3, . . . S_∞. For the animal to be able to foresee a new collision when moving in any particular direction, say, D_k, it must possess a remembrance of collision distinguished by the two values D_k and S_k. And to foresee collisions under *all* circumstances, it must possess the infinite series of remembrances distinguished by $D_1\ S_1$, $D_2\ S_2$, $D_3\ S_3$, . . . $D_\infty\ S_\infty$. The mental complication is enormous. Any animal labouring under it must be at incalculable disadvantage in the struggle for existence.

Can matters be simplified by shifting the sensorial localisation to any *new* site instead of its natural one, the sentient organ? It will easily be seen that, when the animal collides with the object from varying directions, not only the sentient organ, but also all other possible sites of sensorial localisation (*i.e.*, all sites fixed relatively to the body) change their position relatively to the environment; any new site would still continue to entail upon the animal the necessity of associating the remembrance of collision with an infinite number of

different spatial values. There is only one exception, namely, the site of the 'receiving apparatus'; for this at the moment of touching the object always has practically the same position as the latter itself;[1] we will call this position F again. If, then, the animal were to project its sensations *from the site of the sentient organ to that of the 'receiving apparatus,'* every remembrance would (however various the direction of approach) bear one and the same distinguishing value, simply F. Whenever the animal's spontaneous sensations presented a value tending towards F, it would foresee a new collision. Its orientation would be no less simple than that of the Vorticella.

But this projection to the site of the receiving apparatus, so pre-eminently demanded by mental economy, is exactly what we find to occur. Our touch sensations do in actual fact present the strange property of being localised, not in the brain, but in the skin.

It only remains to see how such a projection is practically feasible. By hypothesis, the sentient substance cognises its place and the direction of its movement at every collision;[2] and these data (after two collisions, as a theoretical minimum) suffice mathematically to determine the place of the receiving apparatus. The difficulty is that, in order to make the required projection, the animal will have to execute some unconscious process equivalent in effect to a calculation. *A priori*, it may well be objected that the performance of such a mathematical operation without the aid of a consciously working intellect is inconceivable. But this objection is, it seems to me, completely overruled by the empirically demonstrable fact, that quite analogous (and even much more complicated) unconscious calculations[3] are being performed every moment by every human being. For, as mentioned above, it has been shown that the perfectly simple 'thereness' of any tactual sensation really derives from a great number of separate data, and that not only the calculation but even many of the data are entirely unconscious. Quite recently, this same fact has been published as the result of a very careful and able investigation on quite different lines by Rupp (assisted by G. E. Müller).[4] Perhaps the difficulty of conceiving such un-

[1] It will be remembered that we have assumed the foreign object, for simplicity of argument, to be very small.

[2] In higher organisms, perception of direction of movement may be replaced by that of the relative positions of any different parts of the sentient organ.

[3] Using this expression for brevity only.

[4] Rupp, after corroborating my result, adds: "Durch meine Versuche kommt nur der neue Punkt hinzu, dass die Glieder, deren Lage zur

conscious calculation may be lessened by recalling to mind the performances of Babbage's arithmetical and Jevons' logical machines.

It appears even possible to make not unplausible speculations as to the psychological origin of such calculating mechanism. Let us conceive some animal as still localising its sensations primitively, in the sentient organ. Suppose it to collide with a foreign object. The remembrance of the sensation will be localised in the place (during collision), not of the object, but of the sentient organ. But suppose the animal afterwards to collide with the same object from the opposite direction. The same sensation will arise, this time with a new locality; but the former locality may be expected to come to mind also by association, and to fuse with the new one; the net result will be a localisation midway. And when the animal collides very frequently from random directions, the eventual net result must be to associate the sensation with the sentient organ's mean position at moment of colliding; but this mean position is, clearly, that of the object itself and, therefore, that of the 'receiving apparatus' on collision. The same process recurs for all other foreign objects; all sensations of collision become projected to the site of the 'receiving apparatus'.[1] In this way, it appears quite possible for the projection to the 'receiving apparatus' to develop into a mechanical habit, so that even the first sensation from a strange object, even the spontaneous sensations, are projected in the like manner.

A more formidable problem arises on reflecting that the sentient function eventually retreats, not only from the 'receiving' but also from the *motor* apparatus. Thereupon the sentient organ no longer cognises even its own movements (with reference to the environment); it no longer possesses even the data from which to make the calculation required for the projective process. A solution to this problem seems furnished by the very probable consideration, that at some early phylogenetic (or even ontogenetic) stage, the motor apparatus was already intimately connected with a central nervous system, but nevertheless still continued to be sentient itself also. During this stage, every perception by the

Kenntnis der absoluten Lokalisation irgendwie gegeben sein muss, nicht nur *tatsächlich* nicht visuell vorgestellt werden, sondern in einigen Fällen gar nicht vorgestellt werden *können*" (*Zeitschr. f. Psychologie und Physiologie der Sinnesorgane*, II. Abt., 1906. xli., p. 237).

[1] This process is by no means of a purely imaginary character. Its essential principle is no other than that of the actually observable illusion described on page 184.

motor apparatus of its own movement would become co-ordinated to some particular process in the central nervous system; the latter process must in time become so firmly associated with the presentation of the corresponding movement as to excite this presentation whether or not the movement be cognised by the motor apparatus. But hereupon the motor apparatus has no further need of being sentient; it is at liberty to adapt its structure wholly to its motor functions; the presentations of movement have become 'specific energies' of certain processes in the brain.

An objection to this theory of tactual localisation may perhaps be found in the internal sensations. The 'receiving,' *i.e.* terminal nervous apparatus of these are too well protected to be excitable by collision with foreign objects. Hence, their spatial values have nothing either to gain or to lose economically by coinciding with their terminal apparatus. But this fact appears rather to confirm our theory. For just these sensations are actually *not* localised in their terminal apparatus. Last year Head, Rivers and Sherren succeeded in eliciting internal temperature sensations in certain patients by introducing hot and cold water into the lower part of their bowels; these sensations, far from being localised in the abdominal cavity, seemed to the patients to be near the navel or even in the air![1]

IV.—Mental Economy and the other Sensations.

Let us turn to the other classes of sensation, to begin with, those of monocular sight. It will readily be perceived, that here also the retention of the primitive coincidence between psychological and physiological space would be economically disastrous. For to be always able to foresee the impression of any given retinal element by any given visual object, an animal would need to experience and to remember the infinite number of situations of its sentient organ from which the object was visible, together with the special inclination of its body required in each situation respectively in order to bring the object into view. Even then, the spatial values of any particular visual impression would remain equivocal; for they would apply equally well to any other object chancing to be in the same direction. The complication is as enormous as in the case of touch.

But once more the whole complication may be avoided by projecting all the sensations of the retinal element concerned

[1] *Brain*, 1905, xxix., p. 112.

away from the sentient organ to some other locality (relative to the animal's body). In this case, however, owing to the above-mentioned equivocality, the animal does not possess sufficient data to determine any visual object's site, but only its direction; hence, the projection also can merely be in a direction. This, clearly, will be such as to coincide with the physical direction of any visual object at the moment of vision. On such a projection having become habitual, an animal wishing to approach a visual object always has to move in one and the same way, namely, along the line in which the sensation is projected. Simpler orientation is inconceivable.

Again, there is need of an unconscious calculation. When an animal looks about, each retinal element is being impressed by rays of light in most motley succession. If the retinal elements really had, as frequently maintained, 'specific feelings' of direction, the visual world would be a chaotic phantasmagoria. In truth, a retinal element possesses (in monocular vision) a specific direction, but only as one factor (and an unconscious one) among the many entering into the calculation.

Another factor is invariably furnished by the animal's perception of its own movements. But this is brought into the reckoning just as unconsciously as the others. One may easily test this by letting an eye wander naturally, the other one being closed and the head being kept still. It will not be found that the amount of each eye movement is accurately perceived, that simultaneously the whole visual field makes a leap in exactly the opposite direction to exactly the same extent (up to as much as 100°), and that a new balance is struck between these two factors. On the contrary, all the visual objects will abide fairly quietly in their places, and from beginning to end the perceptive process will be perfectly single.

The remaining factors are of a subsidiary character and chiefly help to determine the apparent remoteness.

A final complication derives from binocular vision. For owing to parallax, every change of position of a visual object (except along the horopter) causes the rays to change direction unequally for the two eyes, and even the ratio of the two changes is inconstant. Hence, it is no longer possible for each retinal element to project its sensations in any constant direction. But on the other hand, this is no longer necessary. For the animal now cognises sufficient data to determine, not merely the direction, but even the definite place of the visual object. Consequently, the projection is now, just as in touch, to a definite place (relative to the body): this is that place which always coincides, at the

moment of vision, with any visual object whatever capable of causing such a combination of sensorial impressions.[1] The whole perception, although deriving from two eyes, is itself—true to the principles of mental economy—perfectly single (or, as it has been called, 'Cyclopean').

Perhaps, it is only a further economy, that visual localisation is not elaborated to any perfection greater than needed practically. Modes of perception that have no general importance are perturbed enough by errors, illusions, double images, vagueness, etc.

Incidentally, our theory has supplied the solution of the old standing problem, as to why the visual field takes the particular form of a superficies. For the two characteristics of a superficies are continuity and two-dimensionality. Now, the continuity of the visual field is due partly to imperfect discrimination and partly to associative supplementation (as seen most strikingly in the case of the 'blind spot'). But the two-dimensionality is at once explained by mental economy; for the latter, as we have seen, demands projection in a direction only, and a direction is a determination in two dimensions.

The same principle applies just as strictly to sound. The difference of this sense from sight derives solely from the physical impracticability of a sensory apparatus able to bring the acoustic rays from each sounding object to a separate sharp focus. Hence, the nerve-elements of an ear, though in themselves readily enough excitable independently of one another (as shown by their reaction to pitch), are not excited differentially according to the object's different situations. Consequently, the very same principle of economical co-ordination of sensorial spatial values to environmental experiences, which above required the visual sensations to form an extended field, here with equal force requires the aural sensations *not* to do so. But still the situation of the sounding object is not without an appreciable effect upon the whole *bin*aural impression; for the ear inclined towards the object is stimulated much more forcibly than the other one; and if the head be moved about, the object's situation can eventually be determined unequivocally. Thereupon, as usual, economy demands projection to that place (relative to the body) which coincides with the position (relative to the environment) occupied at the moment of the sound by any object whatever causing such relative intensities of impression. Such a de-

[1] Of course, the specific character of binocular vision extends only as far from the eyes as the effect of parallax and convergence remains appreciable, that is, for a distance of a few feet.

termination is at best very rough, so that the localisation is always vague and largely influenced by secondary moments. But in any case, the projection is done with the usual perfect mental simplicity; we localise the sound without stopping to notice, or even being able to notice, that one ear is more affected than the other or that we are being influenced by secondary moments; the sound simply appears to be 'there'.

The sensations of taste stand upon the same economical footing as those of touch. And accordingly, they are localised in the same general manner, namely, at the peripheral extremity of the nerve. But the quick diffusion of the sapid particles by the saliva makes the localisation much less definite.

For smells, on the contrary, localisation at the extremity of the nerve would be a great breach of economy. For the regio olfactoria lies rather higher up and farther back than the axis of the eyes; hence, it occupies appreciably varying positions whilst the animal sniffs at the same object but with varying inclinations of the head. The place relative to the body which during the operation of sniffing shifts least relatively to the environment is the nostrils. Here at the nostrils, therefore, is the localisation prescribed by economy. And at the nostrils the localisation actually occurs, as any one may readily convince himself by trial. Again, the sensorial data only suffice to determine the place of the object very imperfectly, so that the localisation remains accordingly vague.

V.—Conclusion.

Thus we have gone through every sense in turn and have found the respective sensations to be localised in very various manners.[1] The so-called law of 'excentric projection,' according to which all sensations are supposed to be localised at the peripheral extremity of the nerve, has proved quite invalid.

[1] The actual fact, that every kind of sensation is localised (more or less distinctly), cannot, I think, be denied by any unprejudiced observer. But many able psychologists tend to the opinion of Locke, that only certain classes of sensation, sight and perhaps touch, essentially 'include the idea of extension'. Here, however, Locke may possibly have fallen into the very error with which he reproaches others, of "taking the measure and possibility of all being, only from their narrow and gross imaginations". For the greater difficulty of dissociating sight and touch from spatiality seems sufficiently accounted for by the fact of just these sensations being localised more definitely than the others (for the economical reasons given above). The experience of the present writer is that certain trains of thought appear to confer eventually the power of conceiving even the visual sensations as unspatial.

One rule alone has never once been infringed; in every instance the localisation has shown itself to be exactly such as to produce the *maximum mental economy*.

Our theory departs from the current ones in that it does not make any sense borrow its localisation from others, but credits each with its own spatial evolution. The theory of several very able psychologists, that the tactual spatial values are fundamentally derived from the visual ones, has never been supported by any observed facts. Not only the bare perception of 'thereness' ('absolute' localisation, 'Lagewahrnehmung'), but also that of extension and apartness ('Raumsinn') has always shown itself quite similar for the visible as for the invisible parts of the body, for normal persons as those born blind. The influence of sight has been traceable solely in the more complicated operations of 'relative' localisation ('Ortssinn'); and even here, the visual images have by no means been found to underlie the tactual ones, but merely to co-operate with them.[1] Nor has any better evidence ever been advanced for the contrary belief, that visual is borrowed from tactual localisation; the time-honoured fancy, that the visual 'top' of an object has become so through association with the act of looking up in order to see it, has been proved by Stratton to be entirely baseless; and when the latter's ingenious experiments succeeded in bringing touch and sight into conflict, both proved remarkably independent, but especially sight.

The same story is told also by comparative psychology. When we find a rudimentary nerveless animal equally ready to retire from a contact or to advance towards a light, we can hardly avoid considering the mental states in the two cases as the beginnings of the tactual and visual sensations respectively; nor can we well do otherwise than attribute to both these sensations an equally definite spatial character, seeing that both cause equally definite spatial reactions. And in either case the localisation is equally bound to drift along the line of least resistance, that is, away from the primitive coincidence with the underlying physiological process to whatever other locality may enable the whole sensual experience to be systematised in the simplest possible manner.

True enough, this evolution must have been largely dependent on the animal being able to move about and perceive its motion. But such primitive experience of motion cannot for a moment be identified with the existing spatial values of human so-called movement-sensations. And above all, the

[1] See *Brit. J. Psych.*, i., p. 306.

experiences of motion have by no means been merely tacked on to the other senses by association, but have rather supplied these with the opportunity of evolving themselves.

Of course, the fact of all the senses evolving their own spaces does not preclude them from more or less modifying each other. Even the principle of economy itself would evidently require that the various senses should not clash; but this general requirement is, at any rate in the vast majority of animals, forestalled; for all the localisations demanded (as explained above) by economy for the respective senses individually happen to harmonise with one another already. Hence, the mutual influence can be little more than supplementary; the data possessed by a single sense often only suffice to determine the localisation partially (this we have found to occur with monocular sight and, above all, with sound); and then the completion of the determination is largely assisted by the other senses.

This paper ought, perhaps, to excuse itself for having dwelt so much upon economy, a more teleological than causal consideration. It has been done because the principle of economy appears at least sufficient to bring sensorial localisation into line with a vast number of other organic phenomena (as well known and striking examples may be quoted the hexagonal shape of honey-cells and Listing's law of rotation of the eyes). Even inorganic phenomena, as has often been pointed out, exhibit a surprising obedience to the same economical principle. Moreover, this principle has a very obvious causal aspect also, in that all races of animals neglecting economy must be at a great disadvantage and eventually die out. We have touched upon psychological causation so briefly, because detailed discussion of this point seems scarcely profitable until more light has been thrown upon the laws of heredity.

It remains to disclaim any pretence at dealing with the *ultimate* genesis of Space. The full acceptance of our economical theory would still leave room for wide divergence of opinion on the great questions, as to whether Space be subjective or objective, *a priori* or *a posteriori*, analysable or unanalysable. But if our theory gives no answer to any of these higher problems, it appears at least to furnish the base from which these ought to be approached.

III.—THE PHENOMENAL SANCTIONS OF THE MORAL LIFE.

By F. C. Doan.

In a former number of Mind [1] under the theme "Phenomenalism in Ethics" the writer outlined his conviction that in conduct the phenomenal thought and act are solicited by motives mostly dissociated from absolute sanctions. This former article in the end promised a more concrete account of this phenomenally perceived moral life. The following is a tentative essay in this direction of concreteness.

It is significant that those ethical systems most scandalised by the impulse-driven life have themselves seldom issued in any system of practical norms. Ethical idealism both by its romantic spirit and in its impractical outcome has affronted the more robust impulses and openly discredited the more practical results of empiricist systems. The method of "trial and error," the sharpening of instincts, the ordering of impulses through experience, the life of practical reason with its partial yet vital adjustments to its realistically perceived world—in all this the absolutist temper remarks only bare irrationality, mere animality. Not by compromising but by radical treatment, the complete healing over in absolute experience of all its apparent gashes of finitude, may this irrational be rationalised, this animal thing transmuted into a transcendental Person. While this perfect idealising of conduct has indeed sublimed our modern culture, has imported into the moral life a deeply romantic tone; yet despite its occasional variations from this solemn, *underlying* theme—its overtones against lying, contract-breaking, suicide; its swelling out of finite spirit through family to state—idealism has subdued many of life's most concrete motives within its too solemn and too recurrent monotone. Certain opinions, certain modes, certain experiences have always remained discordant, unimpressed within their proper Ideas, Substances, Absolutes. Men in their hours of crisis have not

[1] Mind, No. 54, pp. 221-234.

ordered their conduct by excessively speculative norms—however categorically they may have conceived their habitual days. Idealism in its absolute sessions has announced practical resolutions, norms for daily conduct; but with unconscious plagiarism, by a sort of romantic licence, it has copied these enactments from the records of man's past experience. Conformity to these tentative recommendations out of his own past man has naturally held to be not an affair of absolute duty but a matter of prudential habit.

It has been retorted often enough that this case of practical ethics when argued thus upon wholly unspeculative grounds is hopelessly compromised. Norms of conduct are no laws at all save they establish themselves somehow upon an absolute support. Within these frankly practical lines there could be no assurance of absolute loyalty, no protection against defalcation. Thinking and acting would proceed, if not through by-ways of marginal business with their unmitigated risks yet at best through paths of activity so beaten into hardness and flatness as to be unyielding either of pleasure or of inspiration. The secure life, it is urged, though it may experience episodic pleasure, must in its permanent business act upon a thoroughly rational ground. It must be an expression, a foretaste of the Absolute. The prudential in morals, if indeed not productive of lawlessness, anarchy, immorality, is certainly, at the bottom unmoral.

There is, it may be admitted, a sound core of truth in all this romantic protestation against the phenomena-infected life. Ethical theory upon a frankly practical basis must deal in remnants cut out of a supposedly whole cloth of truth. It must show partiality by its every recommendation of prospective activity. The moral life must indeed be relative and stumbling so long as the moral outlook stops short of being absolute. But the defensive demurrer of common sense against all this solemn tautology of accusation is becoming more and more articulate and in the end must be reckoned with. Again and again does the plain man in his life of practical adjustments admit error, blunder, ineffectiveness, but he refuses to confess any sense of depravity or guilt. He argues for exoneration on the ground that omniscient insight of the only sort made out by a rigorously consistent absolutism is of no such nature as to issue concretely in special experiences, in finite moralities. Such an absolute experience—he honours for the argument's sake the really incredible condition that it should own on its proper account an absolute moral insight—never does on any finite account articulate that insight with his partial experience. And here

common sense, unaware of humanist courts of equity, has usually rested its hopeless and prejudged case.

And yet this plain man, though he has failed to construct any absolute sanctions for his experiments with reality and with life, has heroically opened two resorts for practice in living. In one of these he fixes his life as solidly as he may upon a purely prudential foundation; he secures as many and as good as possible of the satisfactions to be had from the world of things and of persons; he licenses his own tastes, *i.e.*, his inner organism, to judge which among several available satisfactions are relatively highest for him; he recognises that in a phenomenal span of time and in a world with others not all satisfactions legitimate enough in themselves can be practically assured; but meanwhile he is unable in his monadic life to relieve its blind and fugitive infelicity by any certain outlook upon time well-ordered into eternity;—with respect to others akin to him he regards as natural and unquestionable a certain adjusting, a certain mutualising of their native, uncommon impulses.[1] Or in emergencies unwontedly puzzling man has on second thought resorted to an ultra-human consciousness, a humane experience, which precisely because not yet conceived as complete in its own account of reality may credibly attend to his partial appeals, may articulate its experimental recommendations with the exigencies of his finite situations. In a word he has resorted to an Experience like his own only *more experienced* and accordingly handier, wiser, perhaps gentler and more poised.[2]

In their long history men have repeatedly drawn from this latter sanctional source. Their ethic has been humanely theistic. In their moral crises when their impulses have stumbled, their instincts failed, men have conceived no absolute experience implicated in these self-transcending emergencies; in their deep-breathing uncertainty of life they have postulated a God both immediate and useful; sometimes a group of gods, each a competent specialist in his proper field; or again a several-aspect God, each Person in Whom is designed to meet effectually a special set of human emergencies; or an ingenuously deified man of their tribe who yet perpetuates within his divinity his erstwhile anthropomorphic

[1] The astonishing thing is that this simple growth through human history of adjusted and adjustable impulses should ever have suggested an ultimate and ontological unity of Persons in Absolute Self. Nor is the case of social ontology furthered by the claim of ontogenetic psychology that in the individual social is prior to self-regarding consciousness.

[2] In both resorts "Better and Worse" are conspicuously bulletined as the "Fundamental Categories". See Santayana's *Life of Reason*, i., p. 46.

outlines and anthropopathic impulses. Indeed his moral crises have at times precipitated even more concrete impulses; appeals to angels, to a virgin, to an image, to a discarnate ancestor, to Eons, to saints,—*to anything short of absolute being.*

How different all this is from the decorous sanity of the romantic, conservative conventions! In this common life there is on the whole development of function through useful habitudes of thought; but there are vicissitudes, fatigue, atrophy as well. Life conceives itself as alternative between development and satisfaction through struggle on the one hand and disorganisation and decay through lassitude on the other. Action postulates reality as changing, shifting, reformulating itself every moment, at one moment richer or poorer in harmonies by comparison with the system of experience of a moment before. The moral agent experiments now with one world and then with another. His impulses, animal though they be, mere "physical facts" are yet creative processes. Their annotations and addenda by changing the world at its open margin alter indeed the entire page of time on which they have recorded their comments and protestations. The free processes of common life are too fugitive to feel any circumpressure of categorical imperatives, of absolute norms. Nothing significant in this living world can be categorically fixed, embalmed as sacramental. Reality is alive, pulsating in every organ, sweating at every pore. Blunders, disasters, tragedies as well as triumphs, escapes, romances are imminent everywhere. Each man claims his own property in being and works it zestfully. His religion, if he have any, is fiducial not ontological. He profits in time: feeling unfit to-day he changes his place in being on the morrow; he allows his temperament, his sex, his irritability, and seeks throughout a goodly adjustment, a harmonious organisation with his world of things and of persons. There is but only on the whole development toward larger, stabler satisfactions.

All this, as a matter of psychology, means that every motor response is conditioned upon the presupposition of discreteness among the elements of the cognitive life. Whether that life be conceived as human or divine, and whether its elements be interpreted by an expert psychology as sensational or as sub-sensational, or with common sense as perceptual and even as conceptual[1]—in any case it is the diversity and not the

[1] The untutored man often regards, as elemental, perceptual or even conceptual experiences which an expert psychology holds to be complex. But in this connexion it should be observed that a bit of experience within which the subject himself discriminates no parts is a literal

unity in that experience which permits and solicits reaction. In the degree that a systematic type of experience becomes submerged in its sense of well-ordered unity in that measure is it withdrawn from the ferments of life.

The fundamental nature of experience is its atomic character. Corresponding to the plural constituents of experience in its cognitive aspect there is a plural array of feeling-tones. From these latter there flow the plural issues, the multifold purposes, the manifold undertakings, the partial and growing harmonies of life. These purposes are tolerant of pursuit just because they summarise desires plenteous and outreaching toward objects clearly discerned, their atomic weights being estimated in terms of their feeling-tones. Only in this self-conscious assessment of life in terms of feeling may action find phenomenal sanction for its otherwise restless motion, its else neutral acquisitiveness of mere being. The value of the action and the worth of the being are measured by the kind and degree of emotive peace they import into the agent's organism.

That which differentiates conduct from automatic action is the degree of self-consciousness with which the moral end is sought. It is in those processes called "moral" that there occurs that vigorous volitional and emotional strain in which phenomenal self-consciousness consists. And it is the stimulus of unique and ultimate feeling-tones within the ends called "moral" that arouses this stirring self-consciousness. Phenomenal self-consciousness is absolutely nothing transcendental but merely a summary in feeling and consequent action of all the concrete details in the moral crisis itself. The moral life is builded upon the assumption whether defensible by an expert psychology or not, that the feeling-tone of a sense-experience is its measure of worth. Whether ethical theory and moral practices can ever transcend primitive feelings, the physiological satisfactions sought and the pains avoided by the first moral agents;[1] whether the perfect sobriety of the civilised man has not estranged him too largely from these primitive impulses; whether his common belief that these supposedly low and contracted hedonic motives of

element of consciousness. A psychology that from without discredits this obvious canon of psychic atomism inadvisedly imports into its data of conscious experience purely physiological units or even physical atoms; herein are the defects of the Münsterbergian and panpsychic atomisms respectively.

[1] As a fact the probability increases that all the convenient groups of emotion are derivatives of this pleasure-pain group; and that even the latter is itself a differentiation of a primitive and perfectly undifferentiated feeling, an amœbous absolute.

the animal and primitive man ought to be transcended is not founded after all upon a really false and unideal interpretation of things bodily we need not digress by inquiring here. For if these primitive hedonic pursuits should ever be thus outgrown and abandoned the substitution for them of some other order of emotion would be inevitable.[1] The moral life may conceivably be persuaded not by ontological nor even by actional motives but only by the amount and quality of feeling-tone aimed at and realised in its being and action. It is indeed incredible that a cognitive situation bare of any felicity of being or that action *quâ* action with no prevision of the at least momentary poise of satisfaction crowning its fulfilment should be pursued as ends in themselves. A pale excess of being, *ontic* anæsthesia; a blind unfeeling acting upon all practically available fulcra, mere physical exercise; —it is not to celebrate these sapless fruitions that men cultivate their impulses and develop their instincts.

How then shall we conceive the sanctions concrete in the moral life? Shall conduct spend its days in the incessant weaving together of the loose ends of experience, avoiding all romantic excesses of the imagination? Shall such a life, no longer seeking its coronation, discerning at last the "irrelevant infinity" of its ideals, deliberately concentrate its concrete moments upon the bare elements of reality, the obviously attainable ends,[2] living each disparately perceived moment among the multifold "given's" of its life,—restless, perpetually self-dirempted by these brute-facts of its world?

This emphatic ethical pluralism is not remote from the precise facts of the moral life. That life in its ultimate motives, in its critical moments is by no means so self-complacently unified as the social traditions of the race have led idealism to suppose. Habitual norms, those forms of conduct really conventional yet ideally regarded as categorical, —these conservative forces in human society do indeed impose upon humanity a sort of unity; but often it is positively impedimental, and at best it concerns mostly the outer raiment, it protects merely the skin and bones of the man; it hardly secures his deeper, his heartier being. After he has done his

[1] In this general sense the much abused dictum of Mr. Mill is thoroughly sound and indefeasible. The tautology of his utterance is abundantly justified by the inability of his perfectionist accusers to comprehend why it *is* tautology. Mr. Mill's repetition is not verbal, as they seem to suppose but *psychological*—the futile attempt of words to dip themselves even once into the same stream of passional experience. Mr. Mill approaches as nearly as words may the fluent phenomena of the moral life.

[2] *Cf.* M. Rauh's *L'Experience Morale*, pp. 223-224.

conservative and conventional duty the natural man is as free and as fugitive as pleasure is fleeting. It is indeed the tragedy of self-conscious morality, of action, *i.e.*, above the stage of merely automatic conventionality, with its manufactured properties, that it must act toward the most elusive of all ends; namely, those evanescent situations sought only because of their feeling-tones.

Herein lies the seeming paradox of pleasure-seeking; while cognitions are relatively static and utterable, the emotive processes through which alone these cognitions are sorted over and their worthiness of response assessed are themselves fluent and accordingly unstable and unutterable. Meanwhile the fact is that men have regarded this preoccupation with pleasure-seeking and pain-avoiding activities as their supreme concern in life. Pleasures and pains whether of the pettier, physiological sort or of the nobler classes (Fear, Anger, Hate, Love)—these low and these high feelings alike exemplify the hedonist paradox; and they all alike have sanctioned the progressive and impulsive conduct of men. Awareness of this coquettish character of pleasure has not yet deterred men from their restless pursuit of these hedonic ends even despite and even until self-diremption; nor has the repeated failure of the lower impulses toward pleasures bred in men a perfect regard for the more temperate, Platonic affections, the unimpulsive contemplation of ideal, self-transcendental ends in which idea and will are one in unconsciousness. At best this awareness of the futility of hedonic purposes has chastened men into the pursuit of the relatively more stable satisfactions. Meanwhile the chronic incontinence of emotion constantly disturbs the harmony of even these more static processes of life. But it is indeed only upon this condition of fluency, only through the self-conscious insight that there are no fixed places, no secure resorts for feeling,—it is only on this condition of fugitive optimism that life can be perpetuated.

The usefulness of those hard places in experience called "cognitions" is two-fold. (1) They afford a solid basis in reality for action; and thus mitigate the fugitive character of emotion. It is his concrete cognitions that perpetuate the naïve realism of the natural man and for ever restrain him from a too romantic idealism.[1] (2) They serve moreover as a basis of reproduction; *i.e.* they are the centres, the *fundamenta* among which may operate the unifying functions of experience, as

[1] The concept of the absolute is nothing except undifferentiated feeling, —a concept, namely, with no perceptual elements to give it body and solidity.

memory, association, imagination, anticipation, etc.[1] Emotive experience is immediate, fluent. It is this very fugitive character of feeling-tones that quickens reflexion into activity, that articulates the scattered elements of cognition into harmonious life. But, just because they are immediate, they have no capacity of deliberation, memory or anticipation; they alone would make of life mere volatility, frothiness, frivolity. Only cognitive processes can solidify and order feeling-tones into peaceful sobriety. Life is through and through a function of emotion; and this intemperate fluency of life is tempered by cognitions only that it may endure the longer within the consuming fire of daily passion.

A little psychologising about the nature of feeling and conception will exhibit this phenomenal character of the concrete sanctions of the moral life.

1. Feeling is the one aspect of experience that has within it what we may call the *quality of infinitude*. Only in its attachment as a tone to a fixed and disparate cognition does it appear as a finite content. Let it detach itself from cognition either by perfect intensity of passion (unmitigated protoplasmic feeling without strains or discharges) or by perfect placidity of abstraction and in either case the content of experience becomes distinctionless, absolute;—perfectly fluent, we may suppose, but acknowledging no vortices, no "squirts" of cognitive causes and consequences. Herein lies the explanation of that sense of infinite worth which according to M. Rauh characterises even obviously finite pursuits. Feeling alone glorifies and sanctions action; and every feeling, as it happens, is infinite after its own kind. The infinitude moreover is through and through current and phenomenal;—in every way the precise opposite of the absolutist infinitude

[1] How largely reason in excess of mere association may enter into moral processes it would be profitless to inquire until genetic investigations into the moral movements of animals and of primitive men have supplied more abundant data than we now have. Perhaps nowhere does a metaphysic of ethics fall more pathetically short of a really profitable account of the phenomena of the moral life than just here. It has accustomed us to affirm without distinction that moral processes do begin with self-conscious rationality. Meanwhile for the genetic researches through which alone "self-conscious rationality" could be filled with phenomenal meaning idealism has shown scant sympathy; probably because such researches have invariably described that self-consciously rational morality as the selection of pleasurable ends through complex processes of association. What systematic ethics most needs just now is not this conventional restricting of Personality as narrowly as possible but a new idealism generously radical in its extension of these self-conscious processes even into the world prejudged as "animal" by the poetic informality of the romantic school.

with its static concepts and noumenal fixtures. The prime concepts of ethics and of religion, *e.g.*, Perfection and Absolute, if they be defined as static, normal only structurally and not functionally, must be abandoned by the new empiricism. Phenomenal infinitude is only a functional and (sometimes) humane postulate of the fugitive life.

2. Moreover conceptual unity partakes of the nature of this phenomenal feeling. Not only is this true of those concepts that summarise the moral processes of the agent. No one in these days would be likely to deny that phenomenally the moral life is a feeling-series. But it may be affirmed that concepts of whatever order have in them this core of feeling, this significance-affirming quality of emotive infinitude. The psychologists have for long granted against the old sensationalist account of the concept a certain uniqueness in the unity of conceptual life. But they have for the most part omitted all inquiry into the inner nature of that uniqueness. They have seemed contented either to report the uniqueness as so much physical fact or else to yield the whole problem to the apriorists. The truth is that this conceptual unity is susceptible of exact psychological description. The unity is emotive. The manifold data of sense-perception have grown together along the lines of their significance for life. Inwardly this significance expresses itself in interests in the objects thus grouped. But the significance of objects and of actions thereto, as I have already urged, is measured by the degree of satisfactory feeling they import into the agent's organism. The sense of sameness usually isolated in a concept as its quintessential feature is not a cognitive affair at all but merely a living postulate—the declaration with respect to the object or objects thus conceived that the same quality of up-to-date satisfactoriness in virtue of which it or they have been thus canonised and supplied with conceptual halos,—this same virtuous sanctity it or they shall continue to import into life world without end. The solidifying of concepts in reality, an enterprise that has monopolised philosophic industry since Plato and with its grotesque fixtures has furnished and conventionalised our moral and religious institutes, is in fact in precise violation of the real character of the conceptual life. The meanest and the noblest concept—lapidity and divinity, let us say—commune over this mutual *fluency* of the beings they connote. The very fibres of association, the probable physical organ of conception, function in transition alone. The purity of a concept varies inversely as the continence of its sensory elements. As the experience omits more and more of the imagery characteristic of halting perceptual processes

the experience becomes more and more purely conceptual. The difference therefore between a really pure concept and the bare feeling of organisms below the level of differentiated sense-areas, we may suppose, is a difference of history merely. Perfect mysticism would be perfectly amœbous feeling. A plurality of concepts, as concepts, neither psychology nor metaphysics has ever been successful in justifying. Only in virtue of its certain pollution by percepts realistically interpreted has one concept been differentiated from another. A world of more than one concept would exhibit perceptual duplicity. All those qualities that seem to differentiate concepts from feelings, *e.g.*, the former's references backward and forward, are in fact not indigenous to the conceptual area at all but are rather the qualities held over in the concept from the realistically interpreted world of percepts through which it has passed and by which its otherwise fugitive passion has been chastened.

The rarity of a pure concept, the utter futility of action upon purely conceptual grounds, *the completely self-contradictory character of ultimate action* is therefore apparent;—unless indeed such ultimate conduct flatten itself completely against a too solid absolute and thus render its activity pointless. The moral life to be concretely pointed and sanctioned must in self-control [1] and in self-defence seek the disparate elements presented in its daily percepts. Its optimism must yet be fugitive, its absolute values only functional, its ultimate good only a postulate.

The concepts by which the moral life summarises and solicits its processes—if indeed they be not merely slightly conscious expressions of functions already well on the way towards purely habitual and automatic operations—are emotion-suffused ideals. These tend to unify themselves completely under an increasingly vague Ideal, as Happiness, Perfection, Well-Being, Self-Realisation and the like. So long as this vague conceptual outlook upon life focuses concrete, perceptual contents all goes well. The system works; something besides absolute and well-ordered self-representation is going on; life is no mere stuttering self-repetition, the mulling over of self-appreciations in innutritious perpetuity.

[1] Prof. Kate Gordon's articles on the relation of Feeling to Discrimination and Conception ought to be elaborated into a complete and final account of the nature of pure conception: see *The Journal of Philosophy, Psychology and Scientific Methods*, vol. ii., pp. 617-622, 645-6; vol. iii., pp. 123-127. Her discussion on page 621 of feeling as an "instrument of control over discrimination" is especially suggestive for the purposes of the neo-hedonism, the self-conscious and chastened hedonism of the modern mind.

But here as in conceptual experiences of whatever sort the conceptualising impulse tends to spread itself over its proper perceptual area so generously, with such romantic excess as inadvertently to defraud itself of all perceptual interests whatsoever. Just as every concept is legitimated only by the concreteness and the vicissitudes of its historic percepts, so Happiness, Perfection and the like are functional only through points of special happinesses, plural perfections and the like. In this life, fluent through its partialities, its hardnesses, the difference between the agent's real and his ideal attainments is a matter of degree only; sometimes a disparity productive of tragedy, catastrophe, madness; but more often a lesion which even the agent himself may meet with a cheerful prognosis estimating in terms of time his period of convalescence into relative wholeness of life with respect to that particular perversion.

These moral crises, these sicknesses of the soul, themselves partial and thus partially remediable are nevertheless symptomatic of the self-diremptive, the imperfectly self-sacrificial character which is eternal and fundamental in the very heart even of ultimate experience. Reality, no matter how largely we may conceive it, is intermittent between the terms of its relationships, everlastingly alternative between the high and the low places it ranges over. Reality, even ultimate, is atomic, gashed through and through by the assaults upon it of partial and human impulses. The same dialectic that affirms that no two terms can exist in a world of absolute experience without a relationship between them must grant conversely no relationship except there be in reality at least two terms between which the feeling of relationship moves; —in moral terms then duplicity of pleasure and pain, of satisfactoriness and unsatisfactoriness, of good and ill, of Jahveh and Devil, Ahura-Mazda and Ahriman. Perfect automaticity or perfect quiescence would alone release the moral agent from these partialities, these sharp contrasts, these tragic insecurities. But such poor methods of relief would pauperise experience itself; in the one case altogether and in the other by transmuting all the points in an otherwise rich and concrete experience into a sheer excess of feeling—a feeling too inarticulate to be even painful.[1]

Life therefore can never be completely unified, never concretely sanctioned by absolute experience. On the assumption of a total experience as fulfilling really all that is implied in partial, self-contradictory experience life everywhere

[1] *Cf.* Stanley's position, *Philosophical Review*, vol. i., p. 433 *ff.*

ought to be fluent in absolute norms. But on the contrary the inner lights, the intuition and the inspiration, fail; the glimpses of good the agent affords in virtue of his patient experiments and frugal speculations with reality, though they extend somewhat toward desirable realisations and encourage certain future adventures, yet do invariably lose themselves in dim margins of inconceivable failures or successes. And the agent must become either heroic or pessimistic. If he be indeed heroic he finds no time for acquiescences, no place for absolute dependence, no occasions for prognostic anticipations of a final fulfilment of his life in a completed system of experience.[1] Moral reason ought to depend more and more self-consciously—it has always depended impulsively—upon retrospective inquiries into the actual course of human development up to date; upon investigations in comparative psychology and in anthropology; upon experimental enlargements of man's moral range. The present generation ought in every way to operate and cultivate its empirical moods. By the method of "trial and error" the curve of this growing life may be plotted; but, while the curve may be thus dotted forward in the direction actually taken with profitable harmonies in the past of the race or of an individual, there exists always the possibility that owing to new insights brought on by new and critical experiences the curve will fail to follow the predicted plot. But beyond this neither finite prudence nor absolute insight can make whole the life of man.

[1] "If we must have an absolute, why not absolute conflict?" is Prof. Gordon's virile (I depend upon it—she will pardon the masculine root of the term) way of stating this case of moral heroism (*op. cit.*, vol. iii., p. 127).

IV.—THE SUBCONSCIOUS FACTORS OF MENTAL PROCESS CONSIDERED IN RELATION TO THOUGHT (I.).

By A. M. Bodkin.

1. The idea of subconscious or unconscious mental factors has been treated in very various ways by different writers. The conception of unconscious mind has an important place in metaphysical discussion. Even in psychology the introduction of unconscious factors has often been upheld for reasons which appear to be partly of a metaphysical character. Unconscious presentations have been postulated both as causes and as effects of observable phenomena.[1] They have been regarded as causes of such phenomena as those of memory, especially by writers who hold with Leibniz that "one perception can in a natural way come only from another perception,"[2] and who are reluctant to assign merely material modifications as conditions within psychological explanation. Unconscious psychical factors have, again, been postulated as effects of all such physiological changes—actions or affections of the organism—as at other times or at higher degrees of intensity have been found to be accompanied by consciousness. Thus G. H. Lewes: "we must have had these sensations and ideas in spite of their being unconscious states, because it is certain that we had the organic states which are their physiological conditions of production, and these cannot exist without sensations and ideas (the products) for causes necessarily involve effects"[3]

At the present time the conception of subconscious, or unconscious, mental modifications of this kind, wholly beyond the range of introspection, seems to meet with little favour among psychologists. It is urged that for psychology it is sufficient to take account, on the one hand, of the phenomena

[1] *Cf.* Brentano. *Psychologie*. Buch ii., Capitel 2, § 45.
[2] *Monadology*. Latta's translation, § 23.
[3] *Problems of Life and Mind*, third series. p. 165.

of consciousness so far as verifiable by introspection, and on the other of bodily changes so far as these can be observed or inferred. Any inquiry as to the ultimate nature of these bodily changes, as, whether they can be held to possess, even when unconscious, some psychical aspect, may be abandoned to metaphysics.

Thus Mr. McDougall[1] urges that by assigning consciousness only where we are compelled by introspection to assign it, and elsewhere speaking of nervous processes simply, we shall avoid obscurities of statement and have a method well adapted for making use of the constantly growing body of knowledge supplied by physiology and psycho-physical experiment.

There is however a different sense in which the idea of the subconscious is employed. It may refer not to supposed modifications of the soul altogether beyond the reach of introspection, but to grades of consciousness, or modes of presentation, less organised, or in some way less distinct and obvious, than those which are taken as typical;—modes which are unconscious only relatively to clearer forms. To the recognition of such presentations we may indeed hardly be 'compelled by introspection,' since by their very nature these elements are readily passed over and hard to verify; yet the consideration of them may nevertheless be necessary for a complete account of the structure and development of intellectual life.

It is the design of the present essay to deal with subconscious factors of this latter kind, in their relation to the thought process: to consider, first, the distinction of what may be called feeling, or sentience, from the contents of thought or clear cognitive consciousness: and, following upon this, to speak of that organisation of sense-material which may take place through bodily activity apart from the work of thought. The latter part of the paper will be occupied with a consideration of the manner in which mental factors of different degrees of organisation may be operative in inferential judgment without coming explicitly before the mind: also the nature of the process by which such factors become explicit will be discussed.

2. In considering the distinction between the material of sense and the formed structure of knowledge, it is to Kant that we naturally turn as the most famous historical exponent of the subject. Prior to Kant there had been a general dis-

[1] Mind, vol. vii., N.S., p. 23.

position among those undertaking the analysis of mind to regard knowledge as something given in the mere action of stimuli upon the senses. In such writers as Locke and Hume we find hardly any recognition of those intellectual implications that accompany even the simplest act of sense-knowledge as this takes place in the developed mind. Locke has, indeed, an interesting reference to certain lower grades of consciousness where attention, and thus clear knowledge, is lacking. Ideas, he says, may be "as faint shadows that make no impression";[1] sensations may fail to be "taken notice of in the understanding":[2] of the operations of our own minds, which pass continually, we have at first no ideas —no knowledge,—they are "like floating visions"[3] till the understanding turns inward upon itself in reflexion.

But Locke can say little as to what is involved in this process of attention or reflexion which he regards as necessary to knowledge. It is conceived by him simply on the analogy of vision. As the eyes turn to various objects within the visible field, so the mind turns, takes notice of the various impressions conveyed into it, or of its own operations, and forthwith "cannot but have plain and clear ideas of them" Qualities and processes alike are known as such in the passive reception of them by the mind. Berkeley and Hume in their closer examination of what is given in sensation still retain the idea of passively accepted items of knowledge, which are indeed wrought into more elaborate constructions by the mind, but which from the first appear as quite definite knowable units.

In the work of Reid a different view of sensation is to be found. The having of a sensation, Reid insists, is a quite different thing from the knowledge of a sense-quality by means of the sensation. The latter is a judgment involving reference both to self and to an external object. It is with such judgments that knowledge begins.

Kant's contention concerning knowledge, though worked out with far more elaboration than that of Reid, appears in important respects similar. Knowledge is shown as a mental construction; it is no simple sum of given elements, but, as it were, a woven texture, within which each element has a certain setting according to a plan that pervades the whole. Nothing is known in isolation, but, as Reid insisted, certain permanent implications accompany every act of knowledge. The matter of sense is received into the forms of the under-

[1] *Essay Concerning Human Understanding*, bk. ii., ch. xix., § 3.
[2] *Ibid.*, bk. ii., ch. ix., § 4. [3] *Ibid.*, bk. ii., ch. i., § 8.

standing and is thus given a place within a world of objects related one to another and to the self.

3. How then are we to think of the nature of the sense-material of this construction? Is it to be regarded simply as a logical abstraction, or has it reality as a distinct psychological factor? The question is a difficult one. Undoubtedly there is a danger to be guarded against in the tendency to "substantiate abstractions"—to assign to every factor that may be distinguished in the analysis of thought's object a distinct psychical existence. The conception of an isolated sense-manifold needing to be compelled into unity by the operation of the ego would seem to be for psychology a mischievous fiction resulting from some such confusion between logical and psychological analysis. In the consideration of developed knowledge we may have occasion to distinguish an element of "pure difference"; we may take account of simple elementary sense qualities in abstraction from the relations in which they stand; but it is now recognised that such sensational atoms are by no means primitive for psychology. It is not with such elements that the mind begins. As Prof. James has insisted we need invoke no special activity of a relating ego to reduce the sense-manifold to unity, for there is originally no such manifold to be unified.[1]

Yet, while rejecting the conception of a primitive sense-experience of isolated impressions, we seem nevertheless compelled to postulate the existence of a condition prior to what we understand by knowledge, and more properly designated sentience or feeling. In such a state we suppose there to be immediate experience of contents which at a later stage would be set over against the mind as objects. That duality which constitutes so fundamental a character of knowledge we can hardly but regard as having had an historical development. The distinction of a not-self from the felt self within the total of consciousness must have been gradually attained. We cannot suppose that what is felt would in the most primitive condition appear as a subjective affection, but neither can we suppose it to be regarded as an object present to self. What we seem forced to postulate at the beginning of mental life is the mere sense of existence, the feeling of a somewhat in which the after-distinctions of knowledge are latent.[2]

Prof. James appears to oppose this view in his spirited

[1] *Principles of Psychology*, vol. i., p. 278.

[2] *Cf.* Bradley, "Consciousness and Experience," MIND, N.S., vol. ii.

account of the nature of primitive sensation. The infant, James declares, in his first dumb awakening to consciousness encounters a something which "has objectivity, unity, substantiality, causality, in the full sense in which any later object or system of objects has these things".[1] It is hard to understand what exact meaning can be attached to so sweeping a statement. One would suppose that in whatever manner "the cætegories of the understanding" might be contained in primitive sensation, it would most certainly not be 'in the full sense' in which our thought later realises them. It would appear however that by objectivity James sometimes intends no more than the absence of distinction between the me and the not-me. He speaks of the condition of minimal consciousness referred to by Prof. Herzen and others, where this distinction is lost, as being a retention of the sense of objectivity with lapse of subjectivity.[2] Again, of the child's first experiences he says that they probably appear in an absolute way, neither in nor out of thought. Only later, through repeated judgments of sameness and comparison of experiences, do we get the notion of realities external to, and independent of, the moment's consciousness.[3] The vigorous contention of Prof. James in favour of the possession by the most primitive sensation of the function of knowledge does not seem, then, to involve substantially a great difference from such a position as that of Bradley. If we retain the name of knowledge for the state where feeling is articulated by thought, where an object is distinguished from self and endowed with a significance beyond the moment, and where relations are recognised, still we should regard the feeling that preceded such knowledge as possessed of a positive content—as being something for itself—and we may be as ready as Prof. James to bow before the "miracle" contained in this fact. Elsewhere[4] James has declared that we may say a feeling "knows" a quality if we, as its critics, believe that outside the feeling is a reality which resembles it in content. This "self-transcendent function of cognition" which we, as critics, recognise need not, James observes, be recognised by the feeling, and through its presence or absence the nature of the feeling is altered not a particle. Certainly in this sense we may grant to feeling the function of knowledge, even while holding that to thought and knowledge proper, in distinction

[1] *Principles of Psychology*, vol. ii., p. 8.
[2] *Ibid.*, vol. i., p. 273. [3] *Ibid.*, p. 272.
[4] "The Function of Cognition," MIND, 1885, p. 33.

from feeling, belongs a self-transcendent function, or objective reference, which is no mere external relation recognised by an onlooker, but a conscious and most fundamental constituent of the nature of the state which possesses it.

A further point to be noticed in regard to feeling or sentience is that it must be thought of as containing the material for the knowledge of relations no less than for that of qualities. Relations, like qualities, in order that they may become objects of knowledge, must be taken possession of by a constructive activity of thought; but that activity is guided and its result determined by the nature of what is first given in feeling or immediate experience. This point has been brought out with much fulness by Hobhouse.[1] We find it clearly recognised earlier, in the work of Lotze. Qualitative, local, and temporal relationships must all, Lotze insists, belong to the material supplied to thought.[2] An activity of unique character is, he holds, required for the recognition of relations,[3] but the nature of the relation which this activity shall reveal must be determined in immediate sensation.

4. In discussing the hypothetical primitive condition where all is feeling, Bradley has asserted: feeling does not cease to exist when cognitive consciousness begins: "everything experienced is on one side felt, and the experienced is also in part still no more than felt". The experienced is "always more than objects together with pleasure and pain".[4] So far as the truth of these statements is recognised they show the importance of the conception of feeling, not only for the doubtful reconstruction of the primitive mind, but all through the psychological account of the developed human consciousness. The first emergence of knowledge from the condition of mere feeling may indeed be a thing incomprehensible to us, but within a mind where knowledge already exists, the passage of contents from the level of feeling to thought, from sentience to knowledge, is one of continuous occurrence.

Of a state of pure feeling it may be that we can have no experience. At all events we cannot, at the time or even in memory, verify the existence of such a state. Nevertheless we experience in various ways approximations toward it, hints or indications sufficient to allow us to form an idea of the nature of feeling as a factor distinct, and in some measure separable, from thought. Thus, there are states of extreme

[1] *Theory of Knowledge*, part i., ch. ii.
[2] *Logic*, bk. i., ch. i., § 17. [3] *Ibid.*, bk. iii., ch. iv., § 335.
[4] MIND, vol. ii., N.S., p. 213.

diffusion of attention where the mind seems to lose itself in a dull blank sense of existence in which no presentation stands out above the rest: there are states of excessive emotional disturbance—such distress as is referred to by Rossetti in a line that Bradley quotes:—[1]

> First 'twas fire in her breast and brain,
> And then scarce hers, but the whole world's pain.

—pain so overwhelming that it seems to involve no object, but is felt as a limitless speechless horror or oppression filling all the space of consciousness. Sense-impressions, again, of too great intensity may have a similar stunning effect, extinguishing intellectual activity, and we have reports of cases where, under the influence of anæsthetics or during the course of a swoon, the usual distinctions of consciousness seem annihilated; thus Prof. Herzen describes such a state as "a sense of existence in general without the least trace of distinction between the me and the not-me".[2]

More important for the present purpose than such experiences are those partial constituents of a total conscious state which seem not to rise above the level of feeling. When attention is engaged with some train of thought, or course of observation, the objects presented appear not to absorb the whole amount of consciousness. Beyond and around them there is feeling, having, as it seems, a positive content of its own, undiscerned, yet colouring the total state, which would be different for its absence or modification. Dr. Stout has termed this outlying portion of consciousness "anoetic".[3] It consists of such mental modifications as are not utilised, or but to a small extent utilised, in determining the reference of thought to an object. It offers material for possible acts of discrimination, since it involves differences which as they exist at the moment are not thought-distinctions but are merely felt.[4] Special sensations which fail to receive attention, and, normally, the whole mass of organic sensation, exist in this manner. Floating imagery irrelevant to the train of thought may also form part of the felt background.

5. From this "region of the subconscious" elements may pass into the circle of attention. As Prof. Sully observes, in speaking of such vague sensations, etc., they "may afterwards emerge into the full light of conscious-

[1] MIND, vol. xiii., p. 3.
[2] Quoted by James, *Psychology*, vol. i., p. 273.
[3] *Analytic Psychology*, vol. i., p. 50. [4] *Ibid.*, pp. 48 and 181.

ness"[1] by means of a special direction of attention upon them; and as being susceptible of such elevation through attention he refers to them as "raw material for mind".[2] This phrase may from one point of view seem dubious; for certainly these elements detached from the thought of the moment are not wholly unmodified by thought. They owe very much of such character and influence as they possess to prior intellectual activity. This is plainly the case with the faintly suggested imagery that clings about thought, and hardly less so with the total mass of sensations from the environment, which, even at times when we seem wholly oblivious of them, appear to exert some depressing or stimulating effect which is in accordance with our consciously formed habits and associations; while they cannot receive the slightest, most transitory glance of attention without being immediately interpreted for what they are.

Even the organic sensations which appear so little elaborated by thought undoubtedly enter into certain permanent mental constructions, the presentation of which they continually sustain or serve to renew. The self, with something of its habitual character and present mood, is sensed in the dim awareness of the bodily sensations. Even recent emotional experiences—pleasures or anxieties—seem to make themselves felt, during forgetfulness, in the faint reverberations of bodily disturbance which they have left behind. In what sense can we designate as mere feeling, or as raw material for mind, sensations into which the ideal interpretation is so closely wrought? . It is evidently only in a relative sense that we can so regard them. They are elements of feeling, not of thought, relatively to those contents which occupy the inner circle of attention. The act of thought or perception occurring at the moment has a certain degree of systematic unity which tends to exclude what is irrelevant, and thus to deprive it of significance.[3] When attention is otherwise absorbed it seems to be only by a divergence of it—a real divergence, however slight, easy and momentary—that we bring out the objective meaning belonging to the sensations from organism and environment. Yet when we do this we cannot believe that our judgment originates the feeling of these sensations as well as their interpretation. The feeling of them seems a persistent fact —a something recognisable retrospectively in the tone of the preceding moment's consciousness as well as in that of the present.

[1] *Human Mind*, vol. i., p. 75. [2] *Ibid.*, p. 76.
[3] *Cf.* Stout, *Analytic Psychology*, vol. i., p. 196.

Mr. Shand has urged this point as being one continually brought out in the judgments of daily life. It is constantly believed that certain sensations and feelings precede the recognition of them: when discriminated they are judged to be old factors in experience. There seems no sufficient reason for supposing such judgments illusory.[1]

We should maintain, then, that such undiscriminated modifications of consciousness show us cases in which the functional or cognitive aspect of presentation is in abeyance as compared with that aspect which may be spoken of as mere psychical existence or feeling. Such immediately experienced modifications offer "raw material" to the present thought, in that it lies with that thought—the attention-process of the moment—to bring out their significance, to assign them a place in the organised texture of Reality, to realise their ideal relations. It seems important to recognise that even what is merely felt cannot be independent of the results of past experience. Modern psychologists have discarded the idea of the unmodified impression, the simple result of a stimulus, offered as a datum for thought. In the structure of the brain every experience must leave its "unimaginable touch," modifying future response; so that, even in the absence of the elaborating process of attention, what is felt will be other than it would have been in a brain undeveloped, or modified by a different course of experience. Yet while maintaining the fact of such modification—taking account of the effects of past thought-activity as well as of past sensation and impulse—we may none the less maintain the distinction, at any given point of time, between the mere existence of presentational material on the one hand, and on the other, its recognition and utilisation in the process of judgment.

6. For the completer elucidation of this distinction, the nature of the judgment-process must be somewhat more fully considered; but, before passing to this topic, it may be well to bring out a further point in regard to presentational modifications as relatively unutilised by thought.

Reference has been so far made chiefly to subconscious factors which may be spoken of as outlying parts of consciousness. Such factors may fail to be taken up into judgment merely because attention is otherwise occupied, and, if so, may be identified upon its release by the effortless repetition of a familiar thought-activity. But we frequently experience acts of discrimination of a somewhat different

[1] "Feeling and Thought," MIND, vol. vii., N.S., pp. 484-495.

character. Presentations which had formerly received attention only as wholes are broken up into their factors and these become for the first time, and perhaps with considerable effort, distinct contents of thought. The question has been much argued whether in such a case the elements discovered can be said to have been previously felt within the whole. Prof. James has denied this. When we come for the first time to discriminate factors within an experience, he asserts such factors are absolutely new psychic modifications.[1] It is properly the objective fact, not the presentation, that is analysed.[2] An objective thing we regard as having all along the qualities which we gradually come to discover, but while the thing remains the same the thoughts of it, as a whole and again as analysed, are 'two absolutely different psychoses'.[3] This is surely going too far even as a reaction against the fallacies committed by the upholders of "the unconscious". It is unquestionably true, as James urges, that a certain thought does not, simply because it refers to an identical object, contain "in an unconscious way," all that may be known to a later thought of that object. Dismissing those cases where actual new sensations are gained by closer examination, the later thought, in a case of purely mental analysis, will contain new elements in the way of suggested symbols, ideas of relation, etc. Yet while taking account of such additions and fully admitting the fundamental character of the distinction between a presentation as discriminated and as undiscriminated, we must surely admit an element of likeness between the earlier and the more developed thought that is of importance also. Dr. Stout has described this element of likeness as a 'correspondence'. If a later state is to know and adequately represent an earlier unanalysed state there must be a correspondence of each thought-distinction in the later to a felt difference in the earlier.[4] Mr. Hobhouse, discussing the same subject, has spoken of the original element of feeling becoming "interwoven" with the relations subsequently discerned. The "clearer" consciousness contains what was present to the more obscure, only further determined by fresh characteristics.[5]

These accounts seem to provide an interpretation more adequate than that of James for what we frequently feel when looking back upon an unanalysed experience in the

[1] *Psychology*, vol. i., p. 173.
[2] *Ibid.*, p. 523 note. [3] *Ibid.*, p. 489.
[4] *Analytic Psychology*, vol. i., p. 61.
[5] *Theory of Knowledge*, pp. 63-64.

light of new distinctions. The pleasure that often accompanies successful mental analysis, especially in the case of æsthetic impressions, seems due not simply to the fact of knowing better "the objective thing," but also to the sense of completion or fulfilment of something actually present, as it were in germ, within the earlier state.

For example, I meet with an analysis of the grotesque, as 'the comic with a flavour of the terrible added, to give a grim dignity and save from triviality'. I have not previously attempted any analysis of such instances of the grotesque as have impressed me (say, some of the strange carved forms on a cathedral), but recalling them as they existed in memory I seem to find the elements indicated unmistakably present within them, though hitherto unseparated and unnamed. It is the development—the illumination by thought of a content already possessed by the mind that seems to constitute the characteristic note and peculiar pleasure of the experience.

In simpler instances such as that given by Stumpf—the analysis of the taste of peppermint—there is a similar experience of correspondence, feature for feature, of elements felt within the whole, or 'synthetically' to characters afterwards discriminated, and set apart by naming.

7. We have now to attempt some consideration of the question what is involved in the transition from feeling to knowledge? What is the essential form or structure of the judgment process into which the elements of sensational experience must be taken up that they may become known? This question has been approached by many writers as part of the doctrine of Apperception. Freed from the dubious metaphysical implications with which it has been sometimes connected, the term apperception serves to designate the process through which a presentation becomes modified and attains significance in accordance with the results of past experience. Apperception has been distinguished from attention by Wundt as referring to the changes set up in ideational content, while attention may be used rather of the subjective sensations and feeling which accompany the change (*Lectures*, xvi., § v.). Similarly Baldwin has spoken of apperception as attention considered in respect of its discriminating, selecting and relating results.[1] The problem of apperception thus conceived comes closely into touch with logical discussions as conducted in the comprehensive spirit of such logicians as Bradley, Bosanquet, Hobhouse.

It appears inevitable that in dealing with the nature of

[1] *Elements of Psychology*, part i., ch. vi., § 3.

thought, psychology and logic, in spite of their different points of view, should largely interpenetrate. As Bosanquet says,[1] the aspect of ideas as 'meanings' as elements of a world of knowledge, is one which, though distinct from their nature as psychical occurrences, cannot but affect that nature, and must not therefore be ignored by the psychologist; while again, the logician, in considering the nature of objects as knowledge, and the validity of thought processes, cannot but be thrown back upon the nature of such thought and knowledge as concretely embodied in the action of individual minds. In our present problem we are concerned with ideas in both their aspects—both as meanings and as psychical occurrences—and we may hope to obtain assistance from the discussions both of logic and of psychology.

As a definition of judgment we may accept that given by Bradley: "Judgment proper is the act which refers an ideal content (recognised as such) to a reality beyond the act".[2] This definition brings out clearly the distinguishing characteristic of judgment—and under the head of judgment we include every act of thought and knowledge—as contrasted with mere feeling or sentience. In judgment there is a reference beyond what is immediately felt or given: there is, as Stout expresses it, 'an acknowledgment of objective existence,'[3] a reference "to something which as the thinker means or intends it is not a present modification of his individual consciousness" (p. 47). It is as a condition of the attainment of this objective reference that the cleft must be made in consciousness which we have spoken of as the distinction of self and not-self. In speaking of such a distinction it is not meant to imply that there is at first any idea of the self as 'a permanent subject of experience,' possessed of certain powers and attributes. Self as an ideal construction appears to be a considerably later attainment than the perception of a world of objects. But before there can be such objective perception it would seem that the distinction must be made which involves the first dim consciousness of self through contrast with the not-self. There must be awareness of a something as relatively permanent and as coercive, in distinction from the sensitive act that occurs at the moment and suffers control. It is difficult to find language which shall be free from misleading associations in expressing the bare essentials of such a distinction. Lotze has described that act of objectification which constitutes the

[1] *Psychology of Moral Self*, p. 13. [2] *Logic*, p. 10.
[3] *Analytic Psychology*, vol. i., p. 97.

starting-point of thought as the separation of something before unseparated—on the one hand 'our sensitive act' or the 'condition which we undergo'; on the other, 'a something which has its being and its meaning in itself, and which continues to be what it is and to mean what it means whether we are conscious of it or not' (*Logic*, bk. i., ch. i., § 2). Lotze has been adversely criticised by Prof. Jones for his error in supposing that we first know the subjective state as such, and then pass over from this to the object. It seems doubtful whether Lotze's language really necessitates this interpretation. His words above referred to—the separation of "something before unseparated"—would seem to lend themselves rather to the view expressed by Bosanquet[1] when he says that if the primitive mental image is "merely such" —merely subjective—that is because it is "not yet taken for such". Its content or meaning is not separated from its mere existence as psychical fact, so that its occurrence can be used as a sign or reference to something beyond. There is no judgment or assertion of objective truth in the mere experience of sensations and images. In order that the claim to truth may be made and objectivity be recognised, the possibility of error must have made itself felt. The mind must be capable of distinguishing in some rudimentary way between a mere mental suggestion and the Reality by which such a suggestion may be either rejected or endorsed.

8. It is by considering the active character of conscious life from the first that we may get some faint indication of the way in which the distinction we are considering might arise.

Before any clear imagery is possible it would seem that there must still be felt what we might term a 'forward trend' in consciousness. The simplest activities of animal life are probably accompanied by strivings which are felt, although blind as to their end, and when these activities have been frequently repeated they can hardly remain completely blind. About the impressions which excite them will gather a mental supplement of some kind, and some feeling of anticipation will accompany the movements of the organism. When the mentally supplied elements within these "feeling-groups"[2] have become sufficiently stable there will arise the possibility of conflict in a case where the movement of the organism fails to bring about the accustomed result; and such conflict we may suppose to generate

[1] *Essentials of Logic*, p. 68.

[2] Bradley, "Association and Thought," MIND, vol. xii.

the recognition of the idea as such, on the one hand, and of a reality beyond it. However doubtfully we may regard this attempted sketch of a primitive experience, yet it may serve to illustrate to us in simple form the nature of the factors present in developed judgment as we know it. The Reality which clashed with the "feeling-group" would be apprehended as coercive; it would stand out as something foreign to the struggling sensitive self; and with that, the idea would first begin to appear and be known as an idea, that is, as something suggested or maintained within the self, but which is in its nature incomplete, looking out toward a world beyond it for acceptance and endorsement. It is no longer mere fact in its own right but makes claim to truth. In the affirmative judgment the validity of this claim is asserted: the cleft between reality and mental content is healed again, and the idea becomes fact, but not in the old immediate undistinguishing fashion. Adopting somewhat mythological language we may say that Reality, while accepting the suggested predicate, maintains the power to reject.

9. We may notice briefly how the fundamental distinction within judgment becomes elaborated in the developed stages of knowledge. The reality which we 'encounter' in perception becomes extended indefinitely through time and space; it becomes qualified by the results of innumerable thought-activities, and is regarded as capable of appropriating new predicates indefinitely. Especially important is the point that it is a reality common to self and others. As it controls my subjective activity so it controls that of others; while in one sense the self—when I come to know myself as a person among persons—is included, along with them, in the sum total of Reality. But through all this qualification and extension, the Reality for me—the ultimate subject of my thought and knowledge—remains rooted in immediate feeling. It is the unique Reality against which I measure myself from moment to moment in action, and which I encounter in sense here and now. In Bosanquet's words, the whole structure of Reality "hangs from my present perception".

As the knowledge of the subject of judgment develops so we may trace a corresponding development in the predicate, or the 'merely ideal' aspect of judgment. It is impossible, Bosanquet observes, to dispense wholly with the conception of an objective world, or world of meanings, distinct from the real world of facts. This conception is indeed, he insists, an abstraction. Yet we are frequently compelled to consider

ideas, by help of abstraction, in respect of those relations which especially determine them, as detached fragments of knowledge not definitely referred to a place in the one individual system of reality (*Logic*, p. 5). In affirmative judgment the ideal content is indeed, as we have seen, referred to, and united with, Reality; it becomes the adjective of concrete fact, yet in its function as adjective, or ideal content, it may be regarded as belonging to a system of predicates—a world of qualities and relations sustained in the minds of thinkers rather than concreted in the actual existence of things. It is as such a system of predicates that Lotze has explained the world of Ideas conceived by Plato.[1] In the world of Ideas those knowable contents which experience presents to us in ceaseless flux and bewildering irregularity are bound together by the efforts of the mind into a system of unchangeable conceptions—a world in which the intellect may feel itself at home and unperturbed (*cf.* Plato, *Phædo*).

This system of predicates, like the Reality from which it is abstracted, is a common possession; it is essentially the work of collective mind; and as embodied in language is participated in by every individual who attains to the power of speech within the community. Again one must refer to the difficulty in expressing such conceptions as these in a manner not open to misconstruction. Prof. Jones has argued vigorously against the abuse of this notion of an ideal system of knowledge distinguished alike from the one concrete Reality and from ideas as occurrences in individual minds.[2] We must of course admit, as Prof. Jones, and Lotze before him, have contended, that such a system can exist neither as concrete things exist, nor as the presentations exist that occur from moment to moment within our minds. Yet none the less the 'transitional conception,' as Bosanquet has termed it, of such a system appears necessary in order to describe the function of ideas in judgment,—to express that power of identical reference and rational agreement among many minds which enables each individual not only to make use of his own sensuous experience but to transcend it, learning from others, and co-operating with them in the advancement of universally valid knowledge.

This then we conceive to be the form of judgment as manifested continuously within the "waking human consciousness". There is awareness of a real world brought home to the mind in sensation, but extended and qualified

[1] *Logic*, bk. iii., ch. ii.
[2] "Idealism and Epistemology," MIND, vol. ii., N.S.

through ideal construction. Within this reality there will be usually some point (which may or may not appear as given in perception), which stands out as the topic of attention, or subject of thought. At this point we attach, or experimentally apply, the ideal contents which are brought before us by the working of our minds, in attentive effort or in more passive reverie, or again as determined by changes in a physical object of perception. As we judge, making application of ideal predicates to the fragment of reality with which we are specially occupied, we unite this by means of relations to much that lies beyond it, we give it a place in the ideal world of knowledge.

10. As has been observed above, this process of judgment is, from the more psychological point of view, described as apperception. The impression or image, which, as it first rises into consciousness may be merely felt, is apperceived when it is taken up into the systematic unity of the judgment process, and related, either to contents which are already present in thought, or to others among those of the mind's intellectual possessions which are not too remote for revival. It is not of course intended to suggest that in the case of every presentation a feeling of it precedes its utilisation in judgment. Frequently the occurrence of a sensation or image and its complete interpretation, so far as the moment's purpose requires, appear absolutely coincident; or, if a gradual process of interpretation does take place, still the presentations which acquire fuller meaning are from the first invested with a considerable degree of ideal significance. Since however our present interest lies in the distinction between clear cognitive consciousness and what is relatively mere feeling, it is with certain special cases of apperception that we are more particularly concerned:—those namely in which the interpretative process is, for an instant or longer, obstructed, thus affording time for the experience of transition from one mode of consciousness to another, from feeling to thought and understanding. We have illustration of such a transition when some shock of external impression breaks in suddenly upon us, and we "collect our minds" to deal with it: or when our attention is drawn by a dim feeling as of some image suggested but unrecalled—some forgotten word, or scene, or melody—which hovers before us impalpable, characterless, till suddenly by a happy flash we secure it. In such experiences we have vividly emphasised the contrast between that degree of distinctness which we demand of every mental object—some setting in the world of knowledge, some assignable character and rela-

tions—and the condition of a mere feeling, unrelated and unnamed. It is true that our disquiet in the presence of such feeling only arises when we actually apply the form of knowledge, and find ourselves for at least some brief moment of effort unable to compel within it the presentational matter experienced; *i.e.*, unable to accomplish in this particular case the work of distinction and relation ordinarily achieved in the effort of attention. Constantly we may experience anoetic sensations, feelings that are not known; such feelings cannot disquiet us until we seek to know them, and they are then, by that very fact, no longer completely anoetic. Still it is in the transition—the seeking and coming to know—that we seem best able to realise, in a relative way, through contrast, the lower grade of consciousness. In the turning of attention,—in the unspoken question, "What is this?" whether the 'this' be an element that has arisen in the field of inattention, or an element within a presentation attended to formerly only as a whole—we experience the application of the form of knowledge. We assign to the obscure experience a place as a feature of reality occurring here and now, and we require of it moreover that it shall reveal some character which may bring it into touch with the system of our knowledge. It must be assimilated to past experience; either recognised through the revival of some distinct individual image, as when we recover the particular memory that has haunted us; or else defined by means of some general concept, as when we identify the wailing sound that has "rung in our ears" as the cry of a sea-bird, or analyse out and name a flavour within a complex impression of taste, or discover in a verse of poetry the subtle alliteration and assonance that had been to us formerly only a vague indescribable charm. In all such cases the apperceptive process is accomplished as the felt or given element is identified with some ideal content—some fixed 'meaning' which is regarded as having its own place in a system of fixed and permanent relations independent of the momentary act that recognises them.

11. So far we have spoken of the apperception-process only as it takes place upon the thought-level. But below the level of thought there is also a process of organisation of the material of experience: new impressions become modified through the results of past activities although such results are not elaborated into the form of concepts, nor are relations between new and old consciously established.

It is in the most immediate connexion with bodily movement that such primitive intellectual activity is carried on.

In the case of a creature that has not attained the power of thought the process of learning by experience appears to consist of a sort of gradual "stamping in" of successful modes of behaviour by means of the pleasurable excitement which they produce[1] At any stage of development the creature is possessed of certain habits or tendencies to particular kinds of movement, and these, exercised, as Prof. Baldwin says, "in a heightened or excessive way" under the stimulus of partially new external impressions and of felt organic craving, form the material from which successful variations are selected. It seems certain that the process although intelligent need involve no exercise of thought proper: the impressions are assimilated for purposes of action, but not brought under general ideas. We ourselves have experience of forms of mental activity in connexion with bodily movement which appear to a large extent independent of the employment of ideas. The results of such activities are preserved in the form of habits wrought into the physical organism; there is acquired what Prof. H. Sidgwick has described as "an adaptation of the muscular to the sensitive and cerebral system, which is not properly knowledge".[2]

Thus in mastering a game of skill, such as tennis or billiards, motor adjustments are performed, and habits of delicately adapted reaction learned, while neither of these reactions themselves, nor of the occasions which prompt them, do we ever attain any conceptual knowledge of corresponding delicacy. We do not of course abandon altogether during such exercises the conceptual attitude. We continue to be guided in a general way by ideal plans and purposes which we could frame to ourselves in language; we make use also of rules and of terms, both technical and of common description, which serve as concepts under which to bring the various efforts and occurrences of the game. Yet the judgments which are thus formed go but a very little way toward expressing the exact character, the minute differences, of the stimuli as these are operative in determining our movements, and of the responsive movements themselves as they are felt to take place.

We may, if we use the term with wide extension, speak of apperception as taking place in regard to those features of impression to which we simply learn to adapt suitable movement; such features become incorporated into a system of

[1] *Cf.* Thorndike, quoted by Stout, *Manual*, pp. 261, 263.
[2] "Theory and Practice," MIND, vol. iv., N.S., p. 370.

mental tendencies through which they attain a practical value, but we must distinguish this case from that in which the system itself is an object of apprehension for consciousness, and it is thus into a tissue of apprehended relations that the impression is received. It would seem to be in this latter case only that we can regard the assimilated presentation as becoming an element in knowledge proper.

As compared with this higher reflective form of cognition we may speak of the process of acquiring bodily skill as being commonly in large measure subconscious. Prof. Lloyd Morgan has so described it; using the term "marginal in consciousness" to express the condition of those sensations of motor adjustment which are at once of such importance for action and so little dealt with by thought.[1]

12. While endeavouring to distinguish the active process of organisation which may take place within the sphere of sentience from the organisation of knowledge proper, we have said little concerning another contrast which is perhaps more frequently emphasised when grades of consciousness are discussed, *viz.*, that between the high and vivid degree of feeling present while new motor combinations are being learnt, and the slight degree of mental disturbance which accompanies habitual movements. In habitual movement not only is there absent such thought-activity as in the human mind attends, though it does not fully penetrate, the sentient processes of motor acquisition, but also there is a great diminution in the amount of mere feeling or sentient disturbance. The motor adjustments are performed more readily and economically: the body of sensation contributed by sympathetic strains and contractions of other parts of the muscular system has disappeared: within the brain changes have probably taken place facilitating the passage of the nervous impulse. Thus the mental accompaniment of the motor process occupies less room in the mental area.[2] It no longer offers such resistance as formerly to the occurrence of other mental activities. It is diminished, or has almost disappeared in respect of its mere psychical existence as felt.

When we contrast with this the state experienced during the original process of motor acquisition—the felt strain of body and absorption of mind—it seems appropriate to describe the latter process as one in which consciousness is vivid or intense, present in a very high degree. Is there any

[1] *Introduction to Comparative Psychology*, p. 168.
[2] *Cf.* Bradley, "Intensity of Psychical States," MIND, 1895.

conflict here with the statements of the preceding discussion in which the process of motor acquisition was designated largely subconscious? There is no conflict when we distinguish the different principles involved in the two kinds of contrast. In speaking of subconscious and of distinctly conscious presentations we have been estimating the mental state in respect of its value for thought; we have inquired how far its content is reflectively utilised, related and referred as an adjective to reality. But now in this contrast of modes of consciousness as faint and as intense a different standard is adopted. The mental process is considered in respect of the amount of feeling-disturbance involved, or of the mental energy absorbed to the exclusion of other processes. In estimating a state successively according to these different standards we may find that the positions assigned to it by no means coincide. A process of motor acquisition, as has been observed above, may be little if at all penetrated by thought, but may yet be absorbing and keenly felt; while on the other hand, as will be considered later, a true process of thought—the apprehension of a content as ideally related and significant—may come to take place with but swift and slight disturbance of consciousness, so that doubt is even possible whether the idea is actually presented at all. It becomes, as the result of repeated thought-activities, an 'implicit' element in consciousness.

(*To be concluded.*)

V.—DISCUSSIONS.

MR. JOACHIM'S *NATURE OF TRUTH.*

I WISH to make a short statement about chapter ii. of Mr. Joachim's recent book on *The Nature of Truth*, because I am not quite satisfied with what Mr. Russell says about it in the October number of MIND. I agree with most of what Mr. Russell says, but not quite with everything; and I also think it may possibly be useful to say some things which he does not say.

In the first place, I do not agree with the reasons which seem to make Mr. Russell almost hopeless of convincing Mr. Joachim upon the main question at issue; and I am therefore actually going to try to convince Mr. Joachim. Mr. Russell seems to think that it must be peculiarly difficult to convince an opponent about a very fundamental question; and that the only kind of argument which can or ought to convince, upon such a question, must be of the nature of a *reductio ad absurdum*, *i.e.* must consist in pointing out that the view you wish to refute logically implies the denial of some other proposition, which already forms part of your opponent's system. But surely, if you can find any proposition whatever, which your opponent will admit to be true, and with regard to which he will also admit that, *if* it is true, the view you wish to refute must be false, then you have a good chance of convincing him, whether the proposition in question already forms part of his system or not. And, if you *can* convince your opponent by such an argument, I see no reason to think that you *ought* not. Provided you yourself think that your argument is a good one, why should you not use it? It is true that you *may* be merely leading your opponent into error; for the fact that he and you both agree will never prove that you are right. But this is a risk which you run, and, I think, run equally, *whatever* form of argument you use. I think, therefore, it would be a great pity if, owing to the idea that no kind of arguments can or ought to convince, except arguments of the kind which Mr. Russell seems to have in mind, philosophers were to refrain from searching for arguments of other kinds. And I see no reason to think that there are not plenty of other arguments, which *might* convince. It is, indeed, obviously very difficult to find them; and I have very little hope that I shall succeed. But so far from its being peculiarly difficult in the case of fundamental questions, I think it is probably easier there than in other

cases, for the very reason that so many different propositions presuppose a fundamental premiss. Any one of these, which your opponent will admit, may suffice to convince him.

In the second place, Mr. Russell seems to admit that Mr. Joachim does hold 'the facts' to be independent of the experience of this or that particular person, in the same sense in which we hold that they are; and that hence, as Mr. Joachim contends, the question whether the facts are independent of particular experiences is irrelevant to the discussion. I think, on the contrary, and shall try to show, that Mr. Russell was wrong to admit this.

In the third place, I think it may possibly be useful if I try to state a little more clearly a few of the points at issue—if I try to state, in a few instances, exactly what I take Mr. Joachim to deny and exactly what I think he has not refuted. Mr. Joachim does not profess to be quite sure whether the main views he attacks are really held by Mr. Russell and me, or not; he says he *may* have misunderstood our words. But, on the other hand, in order to express the views which he thinks false, he constantly uses the very same words which we have used to express views which we think true. Obviously, therefore, he thinks that *either* we do disagree with him about the facts *or else* have used misleading language. And I am in exactly the same position with regard to him. With regard to almost everything he says I feel that *either* he means to assert what is false *or else* is using very misleading language. Now, this being the case, I think it is most probable that we do disagree about the facts; and Mr. Russell simply assumes that we do. But still I think, as Mr. Joachim seems to think, that there is just a doubt whether we do; whether the apparent disagreement may not be wholly or partly due to the fact that Mr. Joachim uses language which I think to be misleading. And I think it is very important that this doubt should, if possible, be removed. If two philosophers really do disagree about the facts, there is surely a much better chance of one convincing the other, if they know exactly what they disagree about; and they cannot know this, if they are not even quite sure whether they disagree at all. If, on the other hand, they really do agree about the facts, but one or other of them uses language so misleading that both cannot help thinking that they disagree, surely this state of things is almost as unsatisfactory as if they disagreed. I think, therefore, that a great deal would be gained, if all doubt could be removed as to whether Mr. Joachim, and those who use similar language, do really disagree about the facts with Mr. Russell and me, or whether each party merely objects to the other party's language. And I have a faint hope that I may be able to remove this doubt, in a few instances.

What, therefore, I propose to do is to state as clearly as I possibly can three propositions which I believe to be true, and which I *think* Mr. Joachim means to deny. I do not think that these three propositions are by any means the only ones which Mr. Joachim attacks.

He seems to me to attack a great many different propositions; and with regard to some, which he seems to attack, I should agree with him that they are false; while with regard to some dozen others, beside the three I shall state, I think that, though Mr. Joachim attacks them, they are true. But I cannot hope to deal shortly with all the points at issue; and the three propositions I shall state seem to me to be *among* the most important which I believe to be true and which I *think* Mr. Joachim means to deny. With regard, then, to these three propositions I shall try to convince Mr. Joachim and those who agree with him: (1) That, if he does *not* mean to deny them, his language is misleading; (2) That, whatever he may have refuted, he has certainly not, in this chapter, refuted *these* three propositions; (3) That the third of them is true. I think a great deal would be gained, if it could be made quite clear *whether* Mr. Joachim, and those who use similar language, do mean to deny these three propositions or not; *that*, if they do *not*, their language is misleading; and *that*, if they *do*, Mr. Joachim has not refuted them. And it would also be a gain if it could be made clear that the third proposition is true. I have some hope, though very little, of making some or all of these things clear to somebody.

The three propositions in question are:—

I. That *some* facts are facts, and *some* truths true, which never have been, are not now, and never will be experienced *at all*, and which are not timelessly experienced either.

II. That some of the facts and truths, which we do *sometimes* experience, are facts and are true, *not only* at the times at which they are experienced, but also *either* at times at which they are not experienced at all, *or else* timelessly; and that these facts and truths are not timelessly experienced either.

III. That *precisely and numerically the same* fact or truth may at one time be experienced by me, when I am seeing the sea and am not seeing a house, and at another time be experienced by me, when I am not seeing the sea and am seeing a house; and that *precisely and numerically the same* fact or truth may be experienced by me, when I am seeing the sea and am not seeing a house, and may be experienced by another person, *e.g.*, by Mr. Joachim, when he is not seeing the sea and is seeing a house.

(1) First, then, I wish to show that *unless* Mr. Joachim does mean to deny all these three propositions, his language is misleading.

And with regard to I. and II. I think what I have to say will be a little clearer if I first point out exactly how they differ from one another, and exactly what I suspect Mr. Joachim of holding with regard to them.

I., then, asserts that *some* facts and truths are neither experienced at any time at all, nor yet timelessly experienced. II., on the other hand, asserts with regard to *some* of the facts and truths, which are *sometimes* experienced, that it is not *only* at the times when they are experienced that they are facts and are true; and that this is

so, in spite of the fact that they are not timelessly experienced. That is to say, speaking roughly, I. concerns facts or truths that are wholly unknown; whereas II. concerns facts or truths which are *sometimes* known. Now with regard to I., Mr. Joachim seems to me to admit that some facts or truths never have been or will be experienced at any time by any finite mind. He seems to me to admit this on page 56, where he seems to assert that no finite mind will ever know the ground of *every* difference in the Universe; although he seems to believe that there *is* a ground for every difference. I shall, therefore, only accuse him of holding, with regard to I., that facts or truths, which are never known to any finite mind, are nevertheless *known* either at *some* time or timelessly. I shall try to show that, unless he *does* hold this, his language is misleading. With regard to II., on the other hand, Mr. Joachim seems to me to admit no more than that some of the facts and truths, which are known at a particular time by a particular individual, are facts and are true *not only* at that particular time. Here, therefore, I shall accuse him of holding that any such fact or truth, which is ever known at all, is *also* known *either* timelessly *or else* at every time at which it is a fact or is true. I shall try to show that, unless he does hold this, his language is misleading.

First, then, with regard to I., I think that, unless Mr. Joachim does mean to deny it, his language is misleading. And I think this for the following reasons. (*a*) If I. were true, then it would be true, in a very important sense, that some facts and truths are *entirely* independent of experiencing. This would be true in the sense that some facts and truths are not experienced *at all*, either timelessly or at any time. But Mr. Joachim, though he tries to distinguish the senses in which facts are and in which they are not independent of experiencing, never admits them to be independent in *this* sense. Moreover (*b*) Mr. Joachim implies, on page 51, that there is no such thing as a truth which is 'neither known nor recognised'. He must, therefore, hold that every truth, which is never known to any finite mind, *is*, nevertheless, *known*, either timelessly or at *some* time. Finally (*c*) he asserts that 'experiencing' and 'the facts' 'reciprocally involve one another' (p. 41). And surely this language would be very misleading, unless he meant to assert that no fact could be a fact, unless it were experienced *either* at least at *some* time *or* timelessly.

And next, with regard to II., I think that, unless Mr. Joachim means to deny it also, his language is misleading. For (*a*) if II. were true, then it would be true, in a very important sense, that some facts and truths are, if not 'entirely' independent, yet certainly independent of experiencing. This would be true in the sense that some facts and truths, which are *sometimes* experienced, nevertheless are facts and are true *not only* at these times, and this although they are not timelessly experienced. And Mr. Joachim never admits that any facts or truths are independent of

experiencing in *this* sense either. Moreover (*b*) his assertion that experiencing and 'the facts' 'reciprocally involve one another' is surely also misleading, unless he means to deny II. For that assertion naturally implies that no fact could be a fact either timelessly or at any time at which it was not being experienced, unless it were timelessly experienced.

Finally with regard to III., also, I do not think Mr. Joachim ever expressly states whether he means to deny it or not. But again, I think his language is certainly very misleading, unless he does mean to deny it. For (*a*) he does seem expressly to deny that precisely and numerically the same *simple* entity can ever enter into two different complexes (pp. 47-48); and he says nothing to show that he thinks the impossibility due solely to the *simplicity* of the supposed entities. Moreover (*b*) he admits that greenness may be *essentially* the same, whether I or you see it, and whether I or you conceive it; and by this phrase '*essentially* the same' he seems to wish to guard himself against admitting that it is *precisely and numerically the same* in both cases (p. 41). Finally (*c*) he seems certainly to hold that *no* relation whatever is merely 'external' to the terms related, or, in other words, that *every* different relation which a fact has *affects* or *modifies* it in a different way. And from this dogma it follows strictly that, if at one time I am seeing the sea and am not seeing a house, and if at another time I am seeing a house and am not seeing the sea, then any fact or truth, which I may happen to think of at both times, cannot possibly be *precisely and numerically the same* in both instances, since it will be differently modified or affected by its different relations.

(2) For the above reasons, I think Mr. Joachim's language is certainly misleading, unless he does mean to deny all three of my propositions. And next I wish to give reasons for thinking that, supposing he does mean to deny them, he has not in this chapter *refuted* any one of them.

And, first of all, Mr. Joachim's main argument does seem to consist, as Mr. Russell pointed out, in the mere assertion that *no* relations are purely 'external'. That is to say, his main argument against I. and II. is precisely the same as his argument against III. And it is for this reason that I think Mr. Russell was wrong to admit Mr. Joachim's contention that the sense in which the truths and facts which *we* experience from time to time are independent of our temporary experiencing, is irrelevant to the discussion. On the contrary Mr. Joachim's main argument to prove that the facts are dependent on experiencing 'as the common mode in which' different individuals 'manifest their being as conscious' (p. 40), namely the argument that *no* relations are external, is one which, *if* it proves this, will prove also that every fact or truth which I ever experience is dependent on my temporary experiencing *in exactly the same sense* in which it proves all facts or truths to be dependent on 'the common mode'. It will prove that no fact or truth,

which I experience, is merely externally related to my experiencing, just as much as that no fact or truth is merely externally related to 'the common mode'. Accordingly, if by *this* argument Mr. Joachim had refuted the view that some facts and truths are independent of experiencing as 'the common mode,' he would *also* have refuted the view that any facts and truths, which I experience, are independent of *my* experiencing. But I think it is plain that by *this* argument he has not refuted either view. For, as Mr. Russell points out, he seems merely to *assert* that no relations are purely external; and merely to assert this is not sufficient to *refute* the view that some relations *are* purely external.

The above argument seems to be the only one which Mr. Joachim uses against III.; unless we count as arguments the mere assertions that Common Sense agrees with Mr. Joachim, and that, unless he were right, the fact that anything ever is experienced would be a '*miraculous* coincidence'. And it seems, as I have said, to be his main argument also against I. and II. I can only distinguish one other statement, which may possibly be meant as an argument against I. and II., namely the statement on page 40 that no fact could be a fact at all, unless it were the 'object of *possibly-actual* sensating and judging'. I do not wish to dispute this statement; I think it is very likely true that no fact could be a fact, unless it were *capable* of being experienced. But I submit that this argument is by no means sufficient to prove that no fact could be a fact, unless it *actually were* experienced. Whatever it does prove, it does *not* prove that no fact could be a fact, unless it *were actually* experienced, either timelessly or at *some* time; nor does it prove that no fact could be a fact, unless it *were actually* experienced, either timelessly or at *every* time at which it is a fact. It does not, therefore, refute either I., the view that some facts are facts, which are neither experienced timelessly nor yet at any time; nor yet II., the view that some facts are facts either timelessly or at times when they are not experienced at all, and although they are not timelessly experienced either.

(3) I submit, therefore, that Mr. Joachim has not refuted any of my three propositions, although his language is very misleading unless he means to assert that he has refuted them. And with regard to I. and II., this is all that I do wish to submit. I believe that they are true; but I do not profess ever to have proved that they are so, although I hope some day to prove it. But any convincing proof would, I think, necessarily be extremely long and difficult. And for that reason I do not hope now to persuade Mr. Joachim that they are true: I only hope to persuade him that he has not refuted them, and even of this my hope is very small.

But with regard to III., I do think there is just a chance I might persuade him that it is true. For Mr. Joachim admits, we have seen, that he and I may both conceive *essentially the same* fact. And if I and he both do conceive *essentially the same* fact, will he

deny that there is *any* identical element in what we conceive? And if he admits that we can thus both experience an identical element, can he be quite sure that this element can never by any possibility be *precisely and numerically* identical? I admit that often we might quite well speak of two different people, in different circumstances, experiencing an identical element, when in fact they were not experiencing any *numerically* identical element, but only each an element *qualitatively* identical with that which was experienced by the other. But I do not see how two elements can be *qualitatively* identical, unless the quality, in respect of which they are qualitatively identical, is *precisely and numerically* the same; and I do not see how two persons could ever know that they ever experienced *qualitatively* identical elements, unless that did both conceive the *one precisely and numerically identical* quality, in respect of which the *two* qualitatively identical elements were qualitatively identical. For instance, I find it hard to believe that Mr. Joachim at Oxford is totally incapable of denying precisely and numerically the same truth, which I affirm at Edinburgh. And if he is *only* capable of denying a truth *exactly like* that which I affirm, I do not see how he could ever know that the truth which he denied *was* exactly like that which I affirmed. Is Mr. Joachim quite sure of the contrary? I find it difficult to believe that he is. And yet if he admits that two different persons, in different circumstances, can *ever* conceive *any* precisely and numerically identical element, then he is admitting III. to be true, and is admitting that *some* relations are purely 'external,' or, in other words, that *precisely and numerically the same* entity may at one time have relations, which it has *not* got at another time, without becoming internally or intrinsically different.

The above three propositions (I., II., III.) are, I repeat, only a few among the points which seem to me to be at issue in this chapter of Mr. Joachim's. But I thought something would be gained if, merely with regard to these, it could be agreed: (1) that unless Mr. Joachim does mean to deny them, his language is misleading; (2) that he has not refuted any one of them; (3) that there is actually something to be said in favour of the third. But I fear I shall have failed to convince Mr. Joachim and those who agree with him even of this. I am afraid I shall only have confirmed him in his opinion that I am dogmatic and unconvincing.

G. E. Moore.

MR. PRICHARD'S CRITICISM OF PSYCHOLOGY.

If the cat is on the mat, the mat is under the cat. If Jones buys a loaf, a loaf is bought by Jones. In general, the relation of x to y involves a corresponding relation of y to x. It is no less plain that propositions may be true of y on account of its actual or possible relation to x which do not apply to it when its other attributes alone are considered in abstraction from this relation. A husband as such may be under legal or moral obligation to support his wife though he comes under no such obligation as having red hair or as being interested in cricket. Smith, Jones and Robinson are commercial competitors inasmuch as they endeavour to buy from Brown the one loaf which he offers for sale; but they are not commercial competitors inasmuch as they are all snub-nosed. Further, it is a common usage of language to make the application of a general name conditional on the possession of a relational attribute by the things to which the name is to be applied. Such names are applicable to whatever has the relational attribute irrespective of other attributes which may belong to it. And since the relation of x to y always implies a corresponding relation of y to x, a relative name of this kind always is or may be matched by a correlative name. When a man and woman have entered into the relation constituted by marriage, the man on account of his relation to the woman is called a husband, the woman on account of her relation to the man is called a wife.

Suppose now that a critic arises in our midst and selects for criticism the use of the name "wife". This critic apparently finds no difficulty in the correlative name, "husband". Untroubled by the consideration that correlative names must be logically on the same footing, he accepts without demur the use of the name "husband" and objects only to the use of the name "wife". His argument runs as follows: If anyone calls women, *quâ* married, wives, he must commit himself to one or other of two alternative absurdities. (*a*) The first of these alternative absurdities is that the whole being of a woman who is a wife consists in her relation to her husband. On this view, a wife's golden hair or her being a member of the Primrose League are to be regarded as special modifications of her wifehood, having no being apart from her relation to her husband. Further, this absurdity, according to our critic, necessitates another as its logical consequence. Since the whole being of the wife is constituted by her relation to her

husband, her whole being and every partial phase of it must be regarded as part of the being of her husband; her golden hair, for instance, and her membership in the Primrose League must be states or modes not of the lady herself, but of the man to whom she is married. (*b*) If, intimidated by the suffragettes, the unfortunate user of the relative name "wife" seeks for a way of escape from these absurdities, he must, according to the critic, pass from bad to worse. He must fall back on a distinction between a woman *simpliciter* and a woman *quâ* married. But this, it is urged, necessitates a duplication of every woman who is a wife. On the one hand there must be the woman *quâ* woman who has golden hair and is a member of the Primrose League; on the other there must be another distinct woman who is a wife, and this second woman is to be regarded as a copy, simulacrum, double, appearance, or representation of the first. Thus, no man ever marries the real original woman: he only marries a representation of her. When we speak of him as having married the real woman, all that, on this view, can be meant is that he has entered into a mediate or indirect relation to her by directly marrying her phantasmal double.

Now all that I have said concerning relations in general as exemplified by that of husband and wife applies to the relation of a knowing mind to what it knows. In this case also relation involves correlation. If and so far as the mind knows anything, what it knows must be known to it. Again, propositions are true of things *quâ* known which do not apply to them when their other attributes are considered in abstraction from their relation to a mind which knows them. As known, they may in various degrees excite the interest of the knowing subject; they may absorb attention in varying degrees. They may be attended to in their connexion with each other or in detachment from each other. In particular, they may be associated and reproduced. Smoke may suggest fire because in previous experience it has become associated with fire. But in saying that it suggests fire we are not ascribing to it any physical, chemical or geometrical qualifications. It is only as perceived, remembered, imagined or thought of by some one that it can suggest anything. Smoke might rise through countless ages in the blackest and thickest clouds; if no one was in any way aware of it, it could never come to suggest fire. Similarly, if no one knew of fire, fire could never be suggested by smoke or by anything else.

In the last place, it is in strict accordance with the customary and legitimate usage of language to apply a general name to things[1] considered as possessing the relational attribute of being apprehended by an individual mind. This procedure is logically on the

[1] I here use "thing" in the widest sense as applicable to whatever has any kind of being, including material things and mental sensations, universals and logical possibilities. As regards these last I am as strong a realist as Mr. Prichard.

same footing as the use of the general names, *husband, wife, son, father, shepherd.* The word shepherd has no correlative in ordinary speech; but if one were required it would be quite legitimate to give some word this special meaning or even to invent a word for the purpose, *e.g.* "shepts". The terms "presentation" and "object" are employed indifferently by Dr. Ward to indicate things in so far as they are apprehended by individual minds. I, on the contrary, prefer to apply only the word "object" in this comprehensive way, because I have what seems to me a strong motive for giving "presentation" a more limited meaning and making it applicable only to one kind of object or rather to a kind of element which enters into the constitution of every complete object.

Whether "presentation" or "object" or both are used to indicate generally "things in so far as they are apprehended by a knowing mind," Mr. Prichard's critical strictures are precisely on the same logical footing and have precisely the same value as the strictures of our hypothetical critic on the relative term "wife". There is no more reason for affirming that the whole being of a presentation, in this sense, must consist in its relation to a knowing mind, than there is for affirming that the whole being of a wife must consist in her relation to her husband. The further allegation that the whole being of the presentation must be a state or mode of the knowing mind is even more gratuitously unreasonable; it is just as baseless as the corresponding assertion that a wife can be nothing but a state or mode of her husband. Finally in rejecting these absurdities we are not in the least compelled to accept the alternative absurdity which Mr. Prichard so perversely insists on ascribing to me, if not to Ward, the doctrine that we do not know things directly, but that what we directly know is only a mental representation of the things. We are no more bound to assert this than we are bound to assert that a real woman is never married but only phantasmal doubles of real women.

Thus if any one is either a subjective idealist or a representationist or a thorough-going realist he is so *quâ* Metaphysician and not *quâ* Psychologist. For Psychology it is indispensably necessary that he should admit that things are known, come to be known, and cease to be known by individual minds: but it is not indispensably necessary that he should accept any special view of the ultimate nature of knowledge. He is not, for instance, necessarily debarred from being a psychologist by his being a subjective idealist. Logically, perhaps, subjective idealism ought to render impossible every human undertaking. But if the subjective idealist can continue to make his theory work, however illogically, in ordinary life or in chemistry and physiology, he can equally make it work in Psychology. Psychology presupposes that things are known to individual minds; in other words, it presupposes that they are presentations. The subjective idealist asserts that the whole being of things known to an individual mind is constituted by their being thus known; in other words, he affirms not only that they are

presentations, but also that they are nothing but presentations. In affirming this he does not deny the fundamental presupposition of Psychology: on the contrary, he asserts it with a vengeance. This is the significance of Dr. Ward's statement that "the individualistic standpoint" is the proper one in Psychology. Utterly ignoring the qualifying context, Mr. Prichard interprets this to mean that the Psychologist as such maintains the truth of subjective Idealism, reserving the right of denying it when he has to deal with metaphysics instead of Psychology. We need no prophet to rise from the dead to show that this is absurd. But the absurdity is purely the gratuitous product of Mr. Prichard's own brain; it is not in the least attributable to Dr. Ward. For Psychology, the *esse* of the facts with which it deals is *percipi* in the sense that it considers things only in so far as they are at any moment known, or in so far as they come to be known or cease to be known to an individual mind, and so enter into further relations both to the knowing mind and to each other. Now the Subjective Idealist also considers things only in so far as they are known to the individual and his point of view, *in so far as Psychology is directly interested in it*, may therefore be identified with the Psychological point of view. But the Psychologist as such is in no way bound either to affirm or deny Subjective Idealism as a metaphysical theory. Having asserted that he is going to treat of things only in so far as they are presented and that the Subjective Idealist does the same, he is in no wise bound to endorse the further assertion of the Subjective Idealist that the whole being of things which are presentations consists in their being presented. He is no more bound to maintain the truth of Subjective Idealism than the Arithmetician is bound to affirm the truth of the Pythagorean doctrine that "things are numbers". If the Subjective Idealist finds that his view is workable at all he will find that it works in Psychology. There is nothing in it to preclude him from being a Psychologist as there is nothing in the Pythagorean view to preclude its adherent from being a student of Arithmetic. But just as Arithmetic extends no positive support to Pythagoreanism, so Psychology extends no positive support to Subjective Idealism.

This holds also for that modified and weakened form of Subjective Idealism which may conveniently be called Representationism. This doctrine recognises that there are things having an existence which does not consist in their being known to individual minds. But such things are not supposed to be known directly but only by proxy. Between the knowing subject as such and the independent existence there intervenes what is called an idea or ideal content having being only for thought or perception and therefore regarded as mental in its nature. This ideal content alone is directly apprehended; but it is supposed so to resemble or to be otherwise so related to an existence beyond itself that in knowing it we vicariously know its counterpart. Now, if this doctrine does not debar its adherent from ordinary business or from

the physical sciences, it will not debar him from Psychology. It is open to him to use the term presentation as Dr. Ward does in the sense of whatever is known *qua* known, whether directly or indirectly. But as the word naturally suggests immediacy, he will probably confine it to ideal contents and in view of their vicarious function he may prefer to call these "representations" rather than "presentations". It makes no difference from a purely psychological point of view which course he adopts. Inasmuch as a thing is known indirectly, it is indirectly attended to, associated, reproduced and so forth. What is indispensable to psychology is not any special theory of knowledge, good or bad, but only the recognition that things are known, come to be known, and cease to be known to individual minds, and that in this relation to individual minds propositions hold good of them which are not applicable to them in abstraction from this relation.

Mr. Prichard sums up his general criticism as follows: "Psychology, in short, cannot be said to study the world as presented. The words 'as presented' cannot modify the word 'world' and if the 'world as presented' means at bottom the world, Dr. Ward's view identifies psychology with physics." This is all that Mr. Prichard has to say; and surely nothing could be more futile. The words "as presented" can modify the word "world" in the same way that the words "as spherical" or "as yellow" can modify the word "orange". The modification consists in indicating what aspect of the total being of the world or of the orange is to be especially considered.

Mr. Prichard next attempts to show that Ward's supposed fallacy not only affects his definition of Psychology, but also the details of the subject as described by Dr. Ward and others. In the main this detailed criticism is merely a strenuous repetition of Mr. Prichard's own original misunderstanding and confusion. He presupposes throughout that wherever the word "presentation" is used the reference must be to something mental and that, if this is not the case, Psychology becomes indistinguishable from physical science. So far as he merely reiterates these positions, it is needless for me to reiterate my answer, which has already been made sufficiently plain, and which has, in fact, been stated with great clearness by Dr. Ward himself in his definition of Psychology.

Beyond these generalities, however, there are two special points in Mr. Prichard's detailed "illustration of the fallacy" which call for express notice.

In the first place, he finds a stumbling block in the view held by Dr. Ward and myself that sensations form a special class of presentations, and also with our regarding the apprehension of material things as largely consisting in the apprehension of sensations and their qualities and relations. His difficulties arise from the assumption (1) that sensations must be mental in their nature and (2) that their being mental implies that they are subjective in the sense that they are modes of knowing as distinguished from what

is known, that they are acts of perceiving in distinction from what is perceived. But neither Dr. Ward nor myself apply the term "sensation" to anything which can be regarded as mental in this sense.[1] What we refer to when we speak of sensation is something apprehended as distinct from the act of apprehension. Thus a sensation of sound is something recognised, discriminated, analysed and compared; it is not a recognising, discriminating, analysing or comparing. We distinguish within it a certain pitch, timbre and degree of loudness; we compare it with other sound-sensations as regards these attributes. We discover that, as regards pitch and loudness, sound-sensations have a graduated order, and form an ascending scale. Within the scale of pitch we discover further relations, such as that between a note and its octave, etc. These qualities and relations and the sensations which possess them are sharply distinguishable from the subjective acts or processes in which they are apprehended or come to be apprehended. A sensation is no more a perceiving than a potato is a perceiving; it is as absurd to speak of the object of a sensation as it is to speak of the object of a potato. Sensations, then, as the word is applied by Dr. Ward and myself, are distinctively objects or, as Ward would say, "presentations". Further, it is not implied in calling them presentations that their being consists in being known; any one who affirms this does so in accordance with a peculiar metaphysical theory which is in no way presupposed in Psychology. Holding, as I do, in agreement with Mr. Prichard that what is known exists independently of the knowledge of it, I am bound to deny that the being of sensations is constituted by their being known;[2] but this in no way debars me from Psychology.

I am now in a position to deal with the next question raised by Mr. Prichard: "How," he asks, "is it possible for any one who is not misled by the supposed distinction between a thing and a thing as presented to us, to imagine that the same thing red can be at once a quality of a material object and a psychical state or even the quality of a psychical state?" Plainly it is here assumed as self-evident that material things and sensations are in their intrinsic nature absolutely disparate and independent, so that they can have nothing in common. The sphere of material things with their attributes of extension, motion, hardness, colour, sound, taste, fragrance, etc., is supposed to stand apart absolutely self-contained and self-complete independently of all reference to the qualities and relations of sensations. There can, at any rate, be no community of nature between them. Now if *sensation* were taken to mean a mode of knowing in distinction from what is known, there might be some force in Mr. Prichard's contention. But when the term sensation is applied as I apply it, the point of his implied argu-

[1] Dr. Ward would, I believe, refuse to call sensation mental in any sense. *Cf.* his Enc. Article, p. 41.

[2] It may be that they cannot exist without also being known in some manner or degree. But that is another story.

ment is entirely lost. It has force only on the assumption that what Kant calls Transcendental Realism is plainly and irrefragably true. Now Transcendental Realism, with a reservation for "secondary qualities," is the doctrine of Descartes and Locke. It is the very doctrine which, as Kant has shown, led them inevitably to problematical and empirical Idealism, and which led Berkeley to subjective Idealism. It would lead Mr. Prichard to similar unwelcome conclusions if he followed it out logically with due attention to facts.

Mr. Prichard next criticises with curious elaborateness a very innocent passage in my *Manual* (p. 58), in which following in principle the terminology of Ward, I propose to use the term *presentation* in a more special and limited sense than the term *object*. It is quite needless for me to point out in detail that this criticism mainly consists in an obstinate attempt to foist on me views which I do not hold and which my words do not express. I shall here confine myself to a brief restatement of what it is that I did mean.[1] In the first place I did *not* mean to distinguish an object as something unknown from a presentation as something known. On the contrary, I use the term "object" here and everywhere else as equivalent to presentation in Ward's sense. Things are objects, in my view, only in so far as they are known. In the passage under discussion, I suggest a more special and restricted meaning for the term *presentation*. This is based on the fact that in order to apprehend a complex whole in its unity and identity, it is unnecessary to distinguish all its partial features in detail. In continuous attention, it constantly happens that we successively discriminate one partial feature after another, without losing sight of their being partial features of one and the same whole. For example, I may be examining a plant with a view to botanical classification. I successively distinguish the kind of root it has, the shape of its leaves, the arrangement of its leaves, the stipules, the insertion of the stamens, etc. In thus passing from item to item, I am aware of each as being part of a whole and this whole is throughout identified by me as one and the same. The several partial features on which I successively focus attention, so as to discriminate them, constitute, so to speak, handles by which I cognitively lay hold of the whole. In so doing, I no more detach the partial features from the whole and transform them into something mental than I detach a cup's handle from the cup and transform it into flesh and blood when I take hold of the cup by the handle and lift it.

The only remaining point which requires to be noticed here is Mr. Prichard's protest against what he regards as the fallacy of Psychology in attempting to "derive the higher and later processes of mind from the lower and more primitive". This

[1] What I did mean in the *Manual* where I follow Ward's use of words with an unessential modification; my use of "*presentation*" in the *Analytic Psychology* is different.

criticism rests on misunderstanding. It is valid as against Herbart, but hardly as against any later Psychologist of distinction. The Psychologist does indeed regard it as essentially his business to show in detail how the higher processes are preconditioned by the lower. Failure to do this is the defect of what is called Faculty Psychology. But Psychology is in no way bound to treat higher processes as mere complications of lower.[1] It can readily admit that there is something unique in the process of counting. But having recognised this it cannot remain content with saying that we count because we have a counting faculty. The properly psychological problem is to show under what conditions this faculty is brought into play in the systematic order of mental development.

I have now dealt with that part of Mr. Prichard's article which may fairly be regarded as bearing on the general nature and position of Psychology. The rest, which is concerned with certain views more or less peculiar to myself and not merely psychological, I reserve for discussion in the next number of MIND.

G. F. STOUT.

[1] *Cf.* my chapter on "Noetic Synthesis" in the *Analytic Psychology*, vol. ii., ch. v.

PSYCHOLOGY AND KNOWLEDGE.

The investigation of hidden presuppositions is one of the best but most difficult of philosophic exercises, which often results in tracing the finest fallacies to the foulest lairs. The aim, therefore, of Mr. Prichard's interesting and instructive paper in the last number, that of unmasking the assumptions of the psychological treatment of knowledge, is deserving of all applause. Only to make his herculean encounter with the psychological hydra a fair one, he should himself strip off all concealments, and allow his own somewhat remarkable presuppositions to appear. It is, therefore, in the interests of sport that these comments on Mr. Prichard's argument are offered.

To nerve ourselves for our arduous task let us begin by considering Mr. Prichard's avowed or half-avowed assumptions.

(1) It seems a little hazardous, when you attack a hydra, to assume that it only has *one* head. And Psychology is a veritable hydra, long accustomed, whenever one of its forms is demolished, to evolve two fresh ones. It seems a radical error, therefore, only to consider one out of many views of psychology which are in being, and one moreover which, as described on page 27, would not probably be accepted by any living psychologist. But this point needs no elaboration as Mr. Prichard will probably hear about it from others.

(2) On page 34 we come upon a much bigger presupposition, *viz.* "an absolute postulate of knowledge that what is known exists independently of the knowledge of it". It was kind of Mr. Prichard to avow this, for an 'absolute postulate' is new to science and so great a discovery should not be concealed, but exhibited in whatever philosophic substitute for Messrs. Barnum and Bailey can be found. But it would have been kinder still to have explained what it meant, even though 'the attempt to vindicate it would have been out of place'. For one is naturally consumed with curiosity to know what so strangely composite a creature as an 'absolute postulate' can be. It sounds an awe-inspiring but welcome substitute for the 'absolute criteria' of which we have perhaps heard more than enough. And while he is about it, will Mr. Prichard also tell us in what sense he is using that treacherous word 'independent'? For in it assuredly there may lurk many hidden assumptions.

Thus Mr. Prichard's avowed naturally pass over into his unavowed presuppositions, which seem quite numerous.

(1) The most important of these concerns Locke's account of knowledge. It is of course quite true that *if* you define 'knowledge' as dealing with representatives of a Real which is 'beyond' knowledge, you will be involved in some little embarrassment by questions as to the credentials of these representatives. But it seems a little harsh to declare bluntly that knowledge has thereby been rendered impossible (p. 31). For the believers in this view, whose name is legion, have what is at least a verbal answer. They tell us that when our 'ideas' correspond with the transcendent 'real' (however conceived), our 'knowledge' is 'true'. This in fact is what the 'correspondence' view of truth is for; it builds at least a verbal bridge between the objects of human knowledge and the transcendent reals they 'copy'. Now this view may be merely a verbal device which ends in unspeakable nonsense, but if this is what Mr. Prichard meant, he surely should have said so plainly. For the 'correspondence' view has many doughty champions outside the school of Locke and Berkeley.[1] The 'reference-to-reality' view of judgment, as usually formulated, implies it. It is implicit too in Platonism. It is of the essence of all realism. It is no less essential to every form of absolute idealism. In short, with two exceptions, no theory of knowledge has so far been able to dispense with it in some form; and all its forms ultimately coincide. The one exception is solipsism, which seems to leave nothing for the solipsist's direct experience to correspond with; the other is the pragmatic epistemology. Can Mr. Prichard then have been covertly arguing in favour of either of these? But even if he has not, are there not assumptions here which should be dragged to the light?

(2) Another hidden assumption concerns the meaning of the word 'knowledge'. Mr. Prichard has a knack of using it in a way (common also in Plato) in which it *excludes* 'opinion,' 'feeling' and 'sensation' (*e.g.* pp. 34, 36, 52), and if challenged would no doubt urge that in no other sense is 'knowledge' truly *knowledge* at all (*cf.* p. 36 *s.f.*). But he must surely be aware that neither in ordinary life nor in psychology is the meaning of the term so narrowly restricted. Any sort of cognitive awareness is habitually called 'knowing'. The result is an ambiguity which constantly perplexes Mr. Prichard's reader, even if it does not wholly vitiate his argument.

(3) The word 'sensation' similarly seems to be subject to an unavowed ambiguity. In sundry passages (pp. 33, 34, 35) Mr. Prichard speaks as though he believed sensations to be real facts in nature and not mere counters of psychological analysis. But the majority (probably) of psychologists would repudiate this interpretation. Still more would they resent the infliction on them of so complex a thing as a 'headache' as the type of a 'sensation' (p.

[1] Mr. Prichard seems a little hasty in identifying Berkeleyanism and subjective idealism. For the latter is a hydra too, and in no wise restricted to the peculiar assumptions of the former.

34). For this, they might retort, is popular language, and not psychology.

(4) They might complain further that Mr. Prichard had misrepresented them, and plunged himself into mistaken criticisms, by systematically ignoring the well-known duality in the meaning of 'presentation,' which (like all words of this formation) may mean (1) the presented object, and (2) the process of presenting. A little reflection, no doubt, may be needed to see which is the sense a psychologist intended in each passage, but to ignore this distinction seems merely to introduce gratuitous confusion.

In any case, however, it would seem as though even the most anti-psychological of metaphysicians would have to recognise a serious problem here. Must he not sooner or later ask himself *how human knowledge of the Real comes about?* If the Real is knowable at all, its mere existence cannot suffice to make it known. It must somehow be related to our knowledge, unless it is asserted that we always know all reality. However 'independent,' therefore, it may be said to be, it cannot become an object of knowledge without a process which somehow achieves this transformation. And how can any amount of realistic zeal prevent the question of what difference this process makes from becoming a problem for psychology? Even if it should never make any difference at all, it would yet be the height of dogmatic presumption to assume this *a priori*. Nor can I see how anything short of another 'absolute postulate' that no inconvenient questions must be raised can save Mr. Prichard's argument from this admission. But if so, will not psychology secure its position as the science which investigates the effect of the 'presenting' on the 'object' which this process manufactures out of raw 'reality,' and will not the use of 'presentation' as designating a 'thing' be amply justified?

(5) It is an obvious, though not an avowed, and possibly not even a conscious, presupposition of Mr. Prichard's criticism to read the psychological problem in an ontological sense. In the question—'How can I know objects?'—his emphasis falls entirely on the *object* and not on the *cognitive process*. Now this may be a legitimate procedure in dealing with Locke and Berkeley, who were metaphysicians as well as psychologists. But it is not equally applicable to modern psychologists who disclaim this dangerous dignity, and whose interest is clearly in *the human attitude towards objects* rather than in the objects as such. Indeed, without carping, the distinction between 'the choir of heaven' and 'the choir of heaven as presented' plainly says as much. They *are* the same thing, save that in the one case the relation of the object to the subject is abstracted from, while in the other it is dwelt upon. Nor is the psychologist as such concerned to determine the relation (if any) of his epistemological object to the ontological object metaphysicians may discourse about.

(6) That Mr. Prichard has such difficulty in grasping this simple distinction, seems to be chiefly due to the extremely *individualistic*

(not to say solipsistic) point of view which his criticism presupposes. He tacitly assumes that so soon as a psychic process enters an individual mind it is *ipso facto* doomed to solitary confinement therein during the term of its natural existence. But though there is perhaps a sense in which something of the sort might be affirmed, it is not here relevant, unless Mr. Prichard means to assert that all communication between minds is as such impossible. Short of this, he has no right to treat it as inconceivable that the desiderated 'objectivity' may arise from the need of communicating experiences among a plurality of individual minds. In any case it is strange to find Prof. Ward's 'common world of intersubjective intercourse' so totally ignored.

(7) Mr. Prichard lays so much emphasis on the familiar fact that what is perceived is real, that 'knowledge' is 'an apprehension of what is' (p. 48),[1] that one is almost forced to suppose him to imagine that these elementary truisms have brought him to the end, instead of to the beginning, of the real problem of knowledge.

But surely he cannot be unaware that 'reality' is a most ambiguous term, and that, if this wide sense be given to it, the 'real' *includes* the 'unreal,' and 'perception of what is' is often *false?* As objects of perception or thought, are not hallucinations and mathematical ideals, illusions, imaginations, fictions and realities (of the various sciences) all real 'objects' together? Hence the 'reality' which perception vouches for is by no means *real* reality. It is nothing, primarily, but a claim to reality, which may turn out to be unfounded. Mr. Prichard's 'reality,' therefore, is precisely on the same footing with the *claim to truth* which is implied in all judgments, 'true' and 'false' alike, and indeed is merely incidental to this claim.[2] But these claims are empty formalities and settle nothing. Mr. Prichard's theory of knowledge, therefore, so far seems to rest merely on a confusion of an object of knowledge with a 'real' thing, and in order that it may acquire any content and advance even to the dignity of a paradox, it is imperative that it should explain how it discriminates between 'true' perception and hallucination, between 'dreaming' and 'waking,' between the *unreal* 'reality' (which is sometimes said merely to '*seem*'—though Mr. Prichard, apparently, will not admit the propriety of this phrase) and the *real* 'reality' which has made good its claim.

The most obvious way of escaping from such questions, on Mr. Prichard's principles that all perception is of the real and that (ultimately) there are "no appearances at all,"[3] would of course be openly to adopt some of the gay paradoxes which Plato in the *Theætetus* jocosely attributes to the Protagoreans, such as that all perception is true and error is impossible. And that will be great fun, if it is what Mr. Prichard really and seriously means. For

[1] *Cf.* N. S., No. 58, pp. 227, 228, "Perception is of what is," "what I perceive is as I perceive it".

[2] *Cf.* my *Studies in Humanism*, essay v. [3] N. S., No. 58, p. 228.

indubitably, from a practical point of view, a theory of knowledge which renders error impossible would be the best of all things. But the news of the discovery of a theory which is not only infallible itself, but extends complete immunity from error to all assertions whatsoever, is almost too good to be true in this moon-struck world of ours, and will not easily be credited until it is explained more fully. It may be, therefore, that Mr. Prichard has run into paradoxes unawares, and so may find himself in difficulties about explaining how errors are possible and mistakes may be corrected. It will be remembered that these same problems rather baffled Plato. But of course Mr. Prichard may be more successful.

Still it will not do to presume this at present. Indeed when one looks at the rival champions naked and unadorned, Mr. Prichard with all his postulates ('absolute' and otherwise) exposed to view, and Psychology stripped to its very soul and no longer overweighted with loads of technicality, one is not disposed to put *all* one's money on the former. But the cordial interest of all lovers of philosophic sport must accompany Mr. Prichard in his arduous adventure of abolishing Psychology.

F. C. S. SCHILLER.

PROF. TAYLOR'S TREATMENT OF SPACE AND TIME.

In proposing the following objections to Prof. Taylor's treatment of *space* and *time* in his *Elements of Metaphysics*, I am more interested in method than in subject-matter. I have long been impressed with the ineptness and futility of a method which solves problems by turning them over to an Absolute appointed for the purpose. Besides thus relegating to the Absolute, the author makes constant use of a distinction between "perceptual" and "conceptual," which I find inaccurate and confusing. In the chapter on "Space and Time" (chap. iv.) I find both of these methods to obscure the analysis of experiences which stand in the full view of all thinkers, and will lend themselves readily to our joint inspection.

In the following notes I propose to consider (1) Prof. Taylor's distinction between perceptual and conceptual space and time, and (2) his proof of the unreality of space and time.

(1) From the fact that the author refers in the analysis of § 2 to a "space and time of perception," I judge that he uses the term "perceptual" to signify a more or less segregated and homogeneous realm of objects, whose properties and categories are known in perception, and which are distinct from and in contrast to another realm of objects known in conception. But does Prof. Taylor deny that conception has already begun whenever perception is cognitive? If perception be taken to mean experience in which there is a nucleus of sensation (sensation to be defined by the psychologist), it must be admitted that all perception contains a residue which is non-sensational. Now I am unable to find any difference between this non-sensational residue of perception, and what the author means by "conception". Synthesis, analysis and abstraction are already present, and it is always possible by dropping out the sensational nucleus to mark a residuum of thought, memory, imagination, etc. Such distinctions are psychological and quite irrelevant to the cognitive intent of experience. Though in my knowledge, sensation is supplemented by thought, these constituents are indivisibly united in the object known. So far as the object is concerned such a difference is quite extrinsic. I do not know such a difference as a part of any object.

But perhaps Prof. Taylor means to base his distinction upon another circumstance. In any object known I may single out some constituent elements, and neglect the rest. In such analysis I do not pass to another world or realm, but only to more abstract and accordingly more universal elements which I find in the object

originally known. Such conception is not an arbitrary or even a free and independent operation, but only the closer intensive understanding of my initial experience. I abstract and liberate certain constituents of my experience, which do not on that account cease to be its constituents; although, since they may be identified with constituents of other experiences, they are no longer exclusively its constituents. There is no contradiction whatsoever between their generality and particularity. Applying these considerations to space and time we observe that certain spatial and temporal properties may be liberated from the particular location in which they were first discovered. Thus, a mile is a mile whatever the particular positions of its terminal points, and an hour an hour whatever the particular times of its terminal instants. These and other units of distance, interval, form, proportion, etc., may be examined independently of particular locations in the context of experience. Whether that particularity can be provided for without reference to the self, is not essential to our present inquiry. Suffice it to say that particular spaces and times have properties in common, which are both constituents of these various particulars, and also independent of each of them.

Let us now turn to the author's account of perceptual space and time. Perceptual space and time are "limited," "sensibly continuous," and peculiar to the "individual subject". Prof. Taylor's proposition to the effect that perceptual space and time are "sensibly continuous," is questionable and ambiguous. Continuity would seem to depend on analysis, which belongs in the author's scheme to the conceptual rather than to the perceptual division of experiences. Indeed I can see no real difference between the "sensible" continuity which the author attributes to perceptual space, and the "indefinite divisibility" which he attributes to conceptual space. Again, it seems clear to me that the properties of limitedness and uniqueness belong not to the space perceived, but to the psychosis of the percipient. We do not perceive space *to be limited*, nor do we perceive our several spaces *to be unique*. The question as to the limitedness of space does not ordinarily arise, because practical interest terminates in some object which is not taken to be the extreme limit of space, but which happens to be the remotest object to which we turn our attention. And is it not perfectly clear that we perceive our spaces to be *common*, and not unique? No construction is required to overcome our perceptual isolation, for there is no such thing. The common space is rudimentary, original, natural, practical, anything you please but constructed. I can only believe that the properties of the psychological self, common to all of its content, are here mistakenly attributed to a certain group of objects within the field of perceptual experience. These psychological properties, furthermore, are highly abstract, and much more eligible for a place in the conceptual world—if such there be—than the contrary properties.

Let us now consider the transition to the conceptual realm, confining ourselves to the case of space, which is here one, "unlimited," "indefinitely divisible," and constituted of positions which are distinguishable only through their relations. I am wholly at a loss to understand why the author maintains that "as we learn, through intercommunication with our fellows, of the existence for their perception of perceptual extension never directly presented to our own senses, the process of synthesis is extended further, so as to comprise in a single spatial system all the presentation-spaces of the individual percipients in an order once again determined by the direction of the movements of transition from each to the others".[1] I am sure nothing of the kind ever happened to me. It never occurred to me that such synthesis was necessary until I had exercised myself in philosophy sufficiently to be liable to its technical errors. Whatever idea I had of the privacy of the individual time and space, I referred to a perspective which seemed to me to be a corollary of the general spatial world within which I had dealings with nature and with my fellowmen. Whatever synthesis was required to give me a clearer and more definite idea of the general unity of space was only a more careful and persistent thinking about experiences with which I was already familiar, and which had never been invalidated. It is clear, furthermore, that my idea of the indefinite divisibility of space is arrived at only after an inspection of experience somewhat closer than that required for the ordinary exigencies of life. Such analysis, however, does not give me a new space, but only a clearer and more thorough idea of the old space. The property of indefinite divisibility had always been practically assumed; analysis establishes it as an explicit and theoretical proposition.

Similarly, when I geometrise I only carry my analysis and abstraction a bit further than I do in perception. Here again I do not come upon a new space, but only more properties of my original space. There is no conflict between geometry and perception; on the contrary geometry supplements perception precisely as all thought supplements any nucleus of experience to which it may apply itself. The step which is taken in geometry, and to which Prof. Taylor attaches so much importance, is the discovery of certain spatial properties which are independent of particular spatial positions. These constitute the subject-matter of a special science. The elements of the science of geometry are not positions, but distances, proportions, forms, etc. Certain theories may be demonstrated without reference to absolute positions, which will therefore hold of any positions. The positions appear in the demonstration as arbitrarily fixed, because they are intended to represent *any* position. Such individuality as they have is given them by the individuality of the distance, form or proportion in which they figure. In order to apply such demonstrations to individual posi-

[1] *Elements of Metaphysics*, pp. 246-247.

tions it is only necessary to supply absolute values for the points thus arbitrarily designated. Geometry, in short, is the exploitation of such spatial truths as hold independently of position. One may devote one's self exclusively to this task, but the truths which result define the same space as that which contains positions, and only extend our knowledge of that space. It follows as a matter of course that positions, in so far as they are used in geometry, are indistinguishable apart from the special order in which they are put; because, for purposes of demonstration, they are defined as any points whatsoever taken in respect of their relation to that special order. Similarly, if I let *A* represent any father and *B* the son of *A*, *A* and *B* can be distinguished from one another, and from other human beings, only in respect of the paternal and filial relationship. This means only that I can study the paternal and filial relationship in general, in which case *it* becomes the element or individual within my field of study. On the other hand, the paternal and filial relationship has a perfectly intelligible place within the larger field of an empirical study of mankind. Would it not be misleading to distinguish a conceptual mankind in which persons are indistinguishable, from a perceptual mankind in which persons are distinguishable? It seems to me much more important to insist that we have here to do only with different constituents of the one mankind. And I cannot see that the situation is essentially different in the case of space.

(2) But let us turn to the general metaphysical conclusions which Prof. Taylor bases upon the foregoing study. We are told that the Absolute cannot view the world spatially and temporally, because his absoluteness cannot admit of any peculiar spatial or temporal perspective, while his individuality requires that his experience shall be made up of particularity. The Absolute, in short, can experience neither perceptual nor conceptual space and time. This is certainly a very serious disparagement of the Absolute; nor do I see how the imputation can be avoided. But there is no difficulty in attributing both absoluteness and particularity to *space* and *time*. The so-called conceptual space and time provide for our relativities within the self-consistent and objective system of truth. Professor Taylor says that "the conceptual space and time of our scientific construction represent the mere abstract possibility of a finite point of view" (p. 255). Well and good; the so-called perceptual space and time *supply* these finite points of view, and make the whole concrete. If an Absolute must be provided for somehow, he can think these abstract possibilities since they constitute a coherent and intelligible system of truth. It is only the attempt to make him both abstractly finite and abstractly absolute that threatens to disqualify him altogether.

Let me add a word in connexion with the unity of space and time. I quite disagree with the author's version of this matter. Such dreams as are veridical, such imagination as refers to objects whose existence, past, present or future is believed, belong of

course to that one space whose individuality is given it by the inter-related *here's* and *there's* of experience. Both dreams and imagination, on the other hand, deal freely with all sorts of spatial and temporal relations that are independent of position. When dreams are known to be dreams, and it is then that they take their true places in experience, they are provided for in either one or the other of these two groups, or in that limbo of error which no philosophy can escape and which is not inhabited exclusively by spatial and temporal judgments. It is as impossible to *find* any space but the one, or any time but the one, as it is to find any number that does not belong to the number-system. Prof. Taylor's objection to the unity of space and time reduces, therefore, to the proposition that we can never be sure that there is not something which we do not know about. I will leave it to the reader to draw his own conclusions as to the virtue of such an observation.

My difference of opinion is so marked and so detailed that I have great hopes of arriving at a better understanding. I cannot conceive that two persons can find such utterly different things in experience as Prof. Taylor and myself appear to find. I shall therefore welcome any rejoinder which he may be inclined to make.

RALPH BARTON PERRY.

VI.—CRITICAL NOTICES.

The Principles of Mathematics. By BERTRAND RUSSELL, M.A., Late Fellow of Trinity College, Cambridge. Vol. i., Cambridge, at the University Press, 1903. Pp. xxix, 534.

IT may safely be said that Mr. Russell's work *The Principles of Mathematics* will attract the attention of logicians, of mathematicians and of philosophers for a long time to come. Certainly no work of greater importance on logical doctrines has appeared in English since the publication of Boole's *Laws of Thought*. Between the circumstances under which the two authors respectively wrote there is, however, a noteworthy difference. Though there had been attempts before his time to generalize logical doctrines Boole was unacquainted with them. On the other hand, Mr. Russell has with great thoroughness studied the works of the Peanesque school, and to them he very explicitly acknowledges his indebtedness.

As regards the actual contributions of Boole, Peano and Russell to the determination of the scope of Symbolic Logic, the facts are, I think, as follows. The earliest of the three led logicians to perceive that the only Symbolic Logic—he does not of course use this term, which is, I believe, not found before the publication of Venn's book in 1881—which is worthy of the name is a general doctrine, one, that is to say, which is not confined to discussions concerning single terms and a limited number of propositions, but which can deal with terms of any degree of complexity, and with arguments containing any number of propositions. But Boole held that Symbolic Logic, being limited to objects of quality, cannot deal with quantitative mathematics: the latter according to him is another species of deductive reasoning. This view was generally held from 1854 until the early nineties. Then Peano showed that the various formulæ of Mathematics may be expressed in the form of implications. For instance, the formula stating that prime numbers higher than 3 have the form $6N+1$ or the form $6N-1$ may be expressed "$x \in \mathrm{Np} \frown (3+\mathrm{N})$ implies $x \in (6N+1) \smile (6N-1)$," which is, being interpreted, "if x is a prime number and at the same time greater than 3, then x is of the form $(6N+1)$ or of the form $(6N-1)$". In this way Peano has actually turned mathematical formulæ into implications. And, finally, Mr. Russell (1) has presented proof that Peano's procedure is justifiable, and (2) has examined in a philosophical

manner the indefinable notions that lie or that might lie at the basis of Peano's transformation.

Mr. Russell's work opens with a novel definition of Pure Mathematics. "Pure Mathematics," he says, "is the class of all propositions of the form 'p implies q,' where p and q are propositions containing one or more variables, the same in the two propositions, and neither p nor q contains any constants except logical constants." That is to say, Pure Mathematics is concerned with *implications*, and not with statements in which the hypotheses are realised. In the latter case we are dealing with Mixed Mathematics. Hence, contrary to the common view, the propositions of Euclid, asserting as they do actual space, are a part of Mixed Mathematics. Now, since Pure Mathematics is a class of implications, and the latter are just what are dealt with in Symbolic Logic, it follows that Pure Mathematics is part of the material that may be manipulated by the symbolic logician. It might at first sight appear that Mr. Russell is incorrect in stating that implications are the subject-matter of Symbolic Logic, since Boole let symbols primarily represent classes or individuals, and class-inclusion is not the same thing as implication. But Boole let symbols secondarily represent propositions, and, as Mr. Russell shows, class-inclusion may always be expressed as implication. For instance, "all men are mortals" may be expressed as "x is a man implies x is a mortal," where we have an implication between expressions containing the same variable.

Also at first sight there appears to be an error in this definition of Pure Mathematics. For the antecedent in such an expression as "x is a man implies x is a mortal," which is "x is a man" would seem to be a propositional function and not a proposition, since x is a variable. But, though when taken in isolation this expression is truly a propositional function, as constituting part of the implication it is not. In the implication the variable is only *apparent* not *real*. That there is no propositional function in the implication is made clear from the consideration that this implication, being true, is a genuine proposition, and therefore must have a genuine proposition for antecedent and consequent. But, though there are no errors in the definition, I would suggest that an alteration should be made in it. For it is asserted that "p and q are propositions containing one or more variables," and this statement as it stands contains a direct contradiction, since only propositional functions have variables. The substitution of the word "expressions" in this and the succeeding clause would get over the difficulty.

Throughout his work the author is engaged in justifying the above definition of Pure Mathematics. He takes all the various mathematical notions, submits them to analysis, and shows that they may be expressed as implications of the above description. It will thus be seen how it is that the book is of value to such different classes of thinkers. In the first place, mathematicians

find their well-known doctrines appearing in a form entirely novel, which is asserted to be far more rational than the usual one. Secondly, logicians are naturally gratified to find that their science can deal with a large amount of material with which for a long time they thought it could not. And, thirdly, philosophers find in these pages an enumeration of indefinables and primitive propositions, and a thorough discussion of both.

Commencing with the more philosophical side of the subject, Mr. Russell enumerates the indefinables with which he starts in order that the above definition of Pure Mathematics may hold. They are implications, the relation of a term to a class of which it is a member, the notion of *such that*, the notion of relation, and such further notions as may be involved in the general notion of propositions of the form mentioned in his definition. The list is, he maintains, an arbitrary one. This is to a certain extent undoubtedly true. The reason is that definition in mathematics is not the same as philosophical definition: in the former we define when we point out a fixed relation in which a term stands to a fixed term, whereas in philosophical definition we are engaged in analyzing concepts (p. 27). But I would remark that, though one set of indefinables will do as well as another for explaining the formulæ of mathematics, one set is not as philosophically satisfactory as another. As Mr. Russell says, there are philosophical difficulties involved in the analysis of these indefinable notions. The best procedure, therefore, would seem to be to select that set which involves the fewest of such difficulties. To this extent then the selection of the set of indefinables is not an arbitrary matter. We may, indeed, say that the Kantian philosophers have here a special claim on the consideration of mathematical logicians. For the procedure of the latter by means of deductions from indefinables involves the rejection of the Kantian doctrine concerning the ground of the validity of mathematical reasoning. Kant asserted, that is to say, that mathematical reasoning "is not strictly formal, but always uses intuition," while Peano and Russell maintain that "all mathematics can be strictly and formally deduced". The philosophical doctrine that Kantians are asked to accept should, therefore, be the one which involves the smallest number of difficulties.

It will be seen that in the above definition there is involved a 'variable' element. To the discussion of this Mr. Russell devotes much space. It is, as he says, one of the most difficult notions with which logic has to deal. His discussion of the notion is very thorough, but I would point how easy it is for the most careful thinker on this subject to slip into an erroneous way of speaking, and so to mislead his readers. On p. 6 the author says—he speaks similarly in several other places—and says truly that the typical proposition of mathematics is of the form "$\phi\,(x, y, z, \ldots)$ implies $\psi\,(x, y, z, \ldots)$ whatever values $x, y, z, \ldots$ may have. . . . It is not asserted that ϕ is always true, nor yet that ψ is always true,

but merely that, in all cases, when ϕ is false as much as when ϕ is true, ψ follows from it." Here he speaks of ϕ as being "not always true". In doing this he is not falling into the mistake of speaking of propositions as being sometimes true and sometimes false; he clearly recognises that ϕ when taken in isolation, is a propositional function. But then propositional functions are not either true or false, but the propositions which the function yields when we give definite values to the variables have one of these attributes. Hence it is meaningless to say that ϕ is "not always true". Mr. Russell is not confused at all in his own mind, as his other statements and the various doctrines that he accepts abundantly testify. The correct method of stating the facts of the case comes out in his treatment of the variable on p. 93, where, however, curiously enough in another statement he also falls into the above error. What we should say is not that $\phi(x, y, z \ldots)$ is sometimes false and sometimes true, but that the expressions reached when different values are given to x, y, z, . . . are in certain cases false and in others true. By using this language the notion of truth and falsity is not attributed to propositional functions, and yet the full force of the variable is expressed.

Also in the interest of readers of future editions I would suggest that something should be done to clarify the description given on pages 8 and 9 of the relation of Symbolic Logic to mathematics. We are told that "Logic consists of the premisses of mathematics, together with all other propositions which are concerned exclusively with logical constants and with variables but do not fulfil the above definition of mathematics," that "mathematics consists of all the consequences of the above premisses which assert formal implications containing variables, together with such of the premisses themselves as have these marks," and consequently that "some of the premisses of mathematics, *e.g.*, the principle of the syllogism, 'if p implies q, and q implies r, then p implies r,' will belong to mathematics, while others, such as 'implication is a relation,' will belong to logic but not to mathematics." And then in the succeeding paragraph the intention is mentioned of proceeding "to give an outline of Symbolic Logic considered simply as a branch of mathematics." But Symbolic Logic *is* logic and is only accidentally characterized, as Mr. Russell at once mentions, by the use of symbols. How, therefore, logic and mathematics can overlap and yet the former be a branch of the latter the reader must, I think, find it difficult to understand. I presume that what the author means is that Symbolic Logic, considered merely as a set of rules, is about on par with any special branch of mathematics, but that when including an analysis of the primitive conceptions that the rules involve ceases to occupy such a humble position, and becomes the doctrine which, being understood, allows of our treating all the various parts of quantitative mathematics. These facts should, I think, be more fully and clearly expressed than they are in the pages in question. But, further, there is apparently an error

in the author's statement here. He says that such a proposition as "implication is a relation" belongs to logic but does not belong to mathematics. But if this may be read "implications are relations"—and I think it may, for it is not a statement like 'Socrates is a man'—the expression resolves itself into "if x is an implication then x is a relation," and this is clearly a statement that is covered by the definition of Pure Mathematics.

The account just referred to of Symbolic Logic as a branch of mathematics is very complete and accurate. The author points out that there are three parts to the subject, the calculus of propositions, the calculus of classes and the calculus of relations. Between the first two there exists a certain parallelism, *i.e.*, our literal symbols may within limits, that must be carefully observed, be made to stand either for terms or for propositions. It is a question which is the more fundamental use of symbols: Mr. Russell accepts the doctrine which at present finds most favour that this quality attaches to the propositional use. But he is very careful to indicate that either employment is possible as long as we observe the proper rules. He thus shows a distinct advance upon Mr. MacColl, who first emphasized the propositional use, but who restricts symbols to such use. Also Mr. Russell points out that Mr. MacColl, though intending to symbolize propositions, is constantly symbolizing propositional functions, and so is led into the error of stating that propositions may sometimes be true and sometimes be false. The genuine proposition cannot be spoken of in this way. Nor indeed, as we have seen, can propositional functions, for to these the terms 'true' and 'false' are not applicable, quite apart from any reference to time: the correct way of speaking of the propositional functions, when to the variables are given special values, is that mentioned above.

In discussing the propositional calculus Mr. Russell observes that the implications there involved are between genuine propositions, not between propositional functions. Generally the two kinds of implications are, as he says, confused: often though material implications are really stated it is formal implications that are meant. The notion of implication itself comes, as we have seen, among the logician's indefinables. If we attempt to define implication by reference to truth and falsehood we only get new implications. Nor can implication be defined in terms of disjunction. For, though 'p implies q' is precisely equivalent to 'p is false or q is true,' we are no nearer a definition of implication, since equivalence is nothing but mutual implication. All this the author makes quite clear. But, when he goes on to assert that, though implication cannot be defined, propositions may be, an element of error is, I think, introduced. He says that propositions are things that imply themselves: only propositions can do this, things that are not propositions implying nothing. Now take the statement 'p implies q'. This may be expressed 'the truth of p implies the truth of q'. Here it is not one proposition that implies

another, but the truth of one that implies the truth of another. Thus propositions are not the only things that imply something: an attribute of one proposition may imply an attribute of another proposition. Hence, whether or not it be true that a proposition may be defined as that which implies itself, this statement must not be based on the statement that things other than propositions imply nothing. The facts point, I think, to the conclusion that the definition in question is not adequate. There are, that is to say, two things each of which may imply itself, namely, a proposition and the truth of a proposition. The definition of the former must, therefore, include, besides a reference to self-implication, the characteristic that distinguishes a proposition from the truth of a proposition.

It will be well to dwell for a moment upon the equivalence just mentioned between implication and disjunction because a statement made by the author in this connection—I refer to the statement "It follows from the above equivalence that of any two propositions there must be one which implies the other, that false propositions imply all propositions, and true propositions are implied by all propositions"—brings out the classification of propositions that he adopts. For, to take only the first part of the statement, *i.e.*, that "of any two propositions there must be one which implies the other," it is clear that the truth of this depends upon the division of propositions into true and false only. Take, for instance, the propositions p and q. There are here regarded four contingencies, *viz.*, the falsity of p or the truth of p or the falsity of q or the truth of q, or, changing the order, we have the falsity of p or the truth of q or the falsity of q or the truth of p. The first two yield 'p implies q' and the second two yield 'q implies p'. And so it is seen that, whatever two propositions we may have chosen, one of them must imply the other. The author thus on this point does not recommend the adoption of Mr. MacColl's procedure, who besides the division into true and false mentions other divisions, and thinks that thereby he has made an advance upon his fellow-symbolists. The truth is that when a proposition has a quality whereby Mr. MacColl assigns the proposition to one of his additional classes there appears another proposition, one that is true or that is false, and that may thus be dealt with by the rules of ordinary Symbolic Logic.

It is pointed out (p. 15) that in the propositional calculus no indefinables are required except the two kinds of implication. The indemonstrable propositions concerning these have not been reduced by the author to fewer than ten, which he enumerates. Six of these on account of their great importance have received special designations. Thus we have the principles of Simplification, Syllogism, Importation, Exportation, Composition and Reduction, terms all except one of which owe their origin to Peano. The principle of Reduction runs as follows: if p implies p and q implies q, then "'p implies q' implies p" implies p. The adoption of the

principle allows of our dispensing with the axioms respecting negation, which is, therefore, no longer required as a primitive idea. Mr. Russell adopts the principle not because of its obvious self-evidence, but because it is equivalent to many propositions that are self-evident, and because for formal purposes it is simpler than any possible alternatives. With regard to these primitive propositions I should like to call attention to two points that are noteworthy. In the first place, Peano's principle of Simplification (1897 ed.), as distinguished from Mr. Russell's, is given not with reference to propositions but with reference to classes. And, in the second place, the principles of Exportation and Importation, which refer to propositions, constitute when taken together a part of Keynes' rule (*Formal Logic*, 4th ed., p. 482) to the effect that "in a universal affirmative or a particular negative proposition the contradictory of any determinant of the subject may be indifferently introduced or omitted as an alternative of the predicate, and *vice versâ*," where the reference is to classes. There are here, therefore, two good instances of the parallelism existing between the propositional and the class calculus. This parallelism between the two kinds of calculus is, however, by no means complete, as Mr. Russell clearly shows.

Coming to the calculus of classes, the author takes as fundamental the notion of the relation of a member of a class to its class, and the notions of a propositional function and of *such that*. The primitive propositions necessary in this calculus are "if x belongs to the class of terms satisfying a propositional function ϕx, then ϕx is true" and "if ϕx and ψx are equivalent propositions for all values of x, then the class of x's such that ϕx is true is identical with the class of x's such that ψx is true". It is pointed out clearly at the conclusion of the discussion of this topic the manner in which propositions of the class calculus are derived from those of the propositional calculus.

In his treatment of the calculus of relations Mr. Russell employs the improved methods of Peano. Peirce and Schröder conceived a relation as being the sum of all couples that stand in a certain relation to one another. This view necessarily involves the adoption of formulæ of summation. Peano and Russell, on the other hand, avoid these formulæ by conceiving a relation as being a class of couples of a certain description. Not that a relation can be *defined* as a class of couples, for this would imply that it is indifferent in what order the members of a couple are taken, whereas the 'sense' (characteristic order) of such members is invariable (p. 95). This improved treatment of relations is due to the fact that the modern writers distinguish between an individual and the class of which that individual is the only member, and in consequence introduce the relation of an individual to a class of which it is a member as a primitive idea. When this distinction is admitted it is possible to symbolize a relation thus $(x, y) \ni \phi (x, y)$. That is to say just as we may (1) start with

a class a, (2) speak of the relation of a member of this class to the class, a relation symbolized by $x \supset a$, and (3) by means of the symbol $\hat{x}(x \supset a)$ reach 'the class of x's which satisfy the condition $x \in a$,' *i.e.*, reach again the class a (see Peano, 1897 ed., p. 30), so may we deal with relations. Relations are thus shown to be susceptible of manipulation by the rules of the class or of the propositional calculus.

Having considered somewhat minutely these early doctrines, the comprehension of which is absolutely essential if the author's treatment of the various mathematical notions is to be understood, I pass (1) to some critical remarks upon what Mr. Russell calls "the Contradiction" (p. 101), and (2) to a description of two samples of the manner in which he shows that it is justifiable to bring the propositions of quantitative mathematics within the scope of Symbolic Logic—the notions to which reference will be made are those of cardinal numbers (p. 111) and motion (p. 469).

The Contradiction came before the author's notice when he endeavoured "to reconcile Cantor's proof that there can be no greatest cardinal number with the very plausible supposition that the class of all terms (which we have seen to be essential to all formal propositions) has necessarily the greatest possible number of members." Mr. Russell gives three forms in which the Contradiction may be stated, *viz.*, the form in terms of predicates, that in terms of class-concepts, and that in terms of classes. The first form runs thus: "if x be a predicate, x may or may not be predicable of itself. Let us assume that 'not-predicable of oneself' is a predicate. Then to suppose either that this predicate is, or that it is not, predicable of itself, is self-contradictory." The form in terms of class-concept is "a class-concept may or may not be a term of its own extension. 'Class-concept which is not a term of its own extension' appears to be a class-concept. But if it is a term of its own extension, it is a class-concept which is not a term of its own extension, and *vice versâ*." And the form with reference to classes runs: "A class as one may be a term of itself as many. Thus the class of all classes is a class; the class of all the terms that are not men is not a man, and so on. Do all the classes that have this properly form a class? If so, is it as one a member of itself as many or not? If it is, then it is one of the classes which, as ones, are not members of themselves as many, and *vice versâ*." The author thinks that the Contradiction may be got rid of if we deny that it is axiomatic that a "class as one is to be found wherever there is a class as many". It seems to me, however, that such an axiom ought not to be rejected. If several things are grouped together to form a class, the grouping of the terms is as much a fact as the existence of the terms grouped. For my part I cannot see that, supposing we adopt the indefinables that are mentioned by the author in his first nine chapters, and that are summed up on pp. 106 and 107, this Contradiction really exists.

It is important to remember that there are four quite distinct notions involved in the author's discussion of indefinables. There is the *term, i.e.*, "whatever may be an object of thought, or may occur in any true or false proposition, or can be counted as one" (p. 43). This word covers *things* (points, instants, and whatever is denoted by proper names, using this designation in a somewhat widened sense) and *concepts*, which include *class-concepts (i.e.*, concepts which give rise to classes). Now if we remember to distinguish these four I think no contradiction arises. Where this is supposed to occur with reference to predicates there is, I believe, omission to note that in every genuine proposition the subject-term only denotes 'things'. If I say "happy is happy" we may interpret the expression in one of three ways. We may say that the combination of sounds constitutes mere noise. Or we may say that the subject-term denotes the things that are happy. Or we may say that what is denoted is the concept of these happy things. On the second interpretation we have a truism. On the third we have a falsity. But in none of the three cases do we have a contradiction. And precisely the same argument holds if the predicate concerned is "not predicable of oneself". Or the argument may be put in another form. The mistake, it may be asserted, is made of holding that something which as predicate is simple may when made a subject be regarded as complex. If I say 'white is white' I am not at liberty to introduce the consideration that the subject here is a colour which is due to the colours of the spectrum, and so to assert that it is self-contradictory to say that these colours are white. But this is really what Mr. Russell does when he holds that it is self-contradictory to say that 'not-predicable of oneself is not predicable of oneself'. He takes a quality, makes it a subject, and then assumes that the quality contains within itself the information that it must not be placed as a subject. The second statement of the Contradiction is in terms of class-concepts. Here I consider that if we hold that the attributes which determine a class are members of the class we state what is false, while if we hold that such attributes are not such members we state a truth: in neither case is there a contradiction. The attributes signified by the term 'man' cannot determine the members of the class 'men' and at the same time be such members. And there is nothing in the class-concept "class-concept which is not a term of its own extension" that makes it an exception to the rule. We cannot, that is to say, at one and the same time conceive an attribute as determining a class and conceive the attribute as a member of that class. Subsequently to our fixing classes by means of attributes we may of course group the attributes themselves. When this is done our groups are no longer class-concepts for they are not occupied in determining classes, but are themselves classes.

Finally, I think there is no contradiction when we concern ourselves with classes. Here I hold that it is not justifiable to speak

of a class as one being a term of itself as many. This language implies that a process of grouping can be what it is, and at the same time be one of the objects that are grouped, and this is impossible.

If the above treatment of the Contradiction is considered adequate the difficulty involved in the endeavour to reconcile Cantor's proof with the fact that the class of all terms must necessarily contain the greatest possible number of members disappears. For a class being merely a method of grouping through the possession of certain attributes there need not be—as of course the author recognises—any limit to the number of members grouped. And yet the view of class as not objective in no way interferes with the possibility of there being formal propositions. We should have instead of 'if x is a member of the class man, then x is a member of the class mortal' such a statement as 'if x is an individual possessing the attribute human, than x is an individual possessing the attribute mortal'. Here the characteristic that will lead to our assigning the second attribute to an individual that may be met with is definite enough, though it may not be possible to reach all the individuals that possess the former attribute. In short there cannot be a greatest cardinal number since the class of numbers is infinite, and yet the class of all terms may have the greatest possible number of members: these two statements taken together show that the class of all terms is an infinite class.

Coming now to the two illustrations mentioned above of the way in which the author analyses mathematical notions, he observes in his treatment of numbers that those writers who hitherto have regarded number as definable have usually made an exception as regards 1, have left + unexplained, and have dealt only with finite numbers. The more modern method of treating cardinals enables us on the other hand to deal equally well with finite and with infinite numbers, to give an exact definition of arithmetical addition, and to define 0 and 1 with as great ease as any other number. Numbers are applicable essentially to classes. Sometimes the classes may be defined by enumeration, sometimes only by means of intension. In both cases we get number as the property of a class. The question then arises as to when classes can have the same number, and the answer is that this occurs when their terms can be correlated one to one. "A relation is one-one when, if x and x' have the relation in question to y, then x and x' are identical; while if x has the relation in question to y and y', then y and y' are identical" (p. 113). When two classes have the same number they are said to be 'similar,' which relation of similarity has the three properties of being 'reflexive,' 'symmetrical' and 'transitive'. This definition of number, however, as the property of a class is, it is pointed out, open to the objection that its adoption involves neglect of the fact that there is an infinite number of properties common to similar classes. Even this definition must, therefore, be rejected, and we are finally led to the

view that the number of a class is 'the class of all classes similar to the given class'.

Relying on this definition, which itself involves certain difficulties that are not overlooked on pp. 115 and 116, the author proceeds to the definition of addition and multiplication. He rightly observes that there is only one fundamental kind of addition, namely the logical kind, for all other kinds can be defined in terms of this and logical multiplication. Addition of integers is thus defined: "if k be a class of classes no two of which have any common terms (called for short an exclusive class of classes), then the arithmetical sum of the numbers of the various classes of k is the number of terms in the logical sum of k". This definition is quite general, applying equally well whether k or its constituents are finite or infinite. The definition of multiplication is adopted from Mr. Whitehead, and is given by the following: "let k be a class of classes, no two of which have any term in common. Form what is called the multiplicative class of k, *i.e.*, the class each of whose terms is a class formed by choosing one and only one term from each of the classes belonging to k. Then the number of terms in the multiplicative class of k is the product of all the numbers of the various classes composing k." In all this the author seems to me to have made out his case, and, therefore, to have supplied justification of the procedure that has been adopted by Peano. The formula, for instance, which I quoted at the outset, is seen to be a correct rendering of the arithmetical statement, since the expression that follows the $x\epsilon$ is shown to be in each case a genuine class.

In discussing motion, the author first considers what is to be meant by matter, as this occurs in rational dynamics—questions as to the actual existence of matter are, as we have seen, irrelevant to Pure Mathematics. In part vi. he showed that all the spaces that are mentioned by mathematicians are definable in terms of logical constants, and he met the arguments that are 'usually lodged against the existence of an absolute space'. These arguments having been met, and common sense affirming such existence, he considered that there is no longer any reason for denying it. But it is not necessary, he now observes, that because there is space there are things in it. If such is the case we must believe it through the evidence of the senses. There are four great classes of things that appear to exist: (1) instants, (2) points, (3) terms which occupy instants but not points, (4) terms which occupy both points and instants. What is meant by *occupying* a point or an instant cannot be explained: it is "a fundamental relation, expressed by *in* or *at*". In class (4) come 'bits of matter' and the so-called secondary qualities. The question then is as to how matter is to be defined. The author considers that no form of the notion of substance is applicable to the definition: what we have to do is to try to distinguish the elementary properties of matter from the secondary qualities. The most fundamental character-

istic of matter lies in its connexion with space and time: "two pieces of matter cannot occupy the same place at the same moment, and the same piece cannot occupy two places at the same moment, though it may occupy two moments at the same place". This description differentiates two pieces of matter from two secondary qualities and from such pairs as colour and hardness, and, indeed, from everything else that exists in space. But, further, every material unit persists through time, and if the positions occupied by the unit in any two moments are different "the positions at times intermediate between the two chosen must form a continuous series". Matter is thus seen to be a "collective name for all pieces of matter, as space for all points and time for all instants".

Having thus arrived at the definition of matter, the author is able to say what is meant by rest and motion. If A is a material point, then "a moment such that an interval containing the given moment otherwise than as an end-point can be assigned, at any point within which interval A is in the same place, is a moment when A is at rest. A moment when this cannot be done is a moment when A is in motion, provided A occupies *some* place at neighbouring moments on either side" (pp. 472, 473). But it is clear that the material point may be replaced by a many-one relation, "whose domain is a certain one-dimensional series, and whose converse domain is contained in a certain three-dimensional series". Thus motion consists "in the correlation of different terms of t [time] with different terms of s [space]," and "a relation R which has a single term of s for its converse domain corresponds to a material particle which is at rest throughout all time". And similarly with the treatment of rest through an interval, a time of momentary rest, and continuous motion. Thus it is demonstrated that all propositions concerning motion are expressible as relations, and these as we have seen are susceptible of manipulation by the rules of the logical calculus.

These two examples will give a sufficiently clear idea perhaps of the way in which Mr. Russell deals with mathematical conceptions. That many philosophers will not accept his ultimate ideas is likely enough. But I think it will be acknowledged that there is a very strong point in favour of the author's doctrines, namely, that they imply that mathematics is true, whereas most other philosophies imply that it is not (Pref., p. viii). The author's philosophy in other words yields results that are in agreement with common sense.

Finally, Mr. Russell with his usual justice in dealing with the writings of other thinkers assigns its full value to the work of Frege. To some extent the results of the two writers overlap. But there has been no waste of effort. Considering the extreme cumbrousness of Frege's symbolism, it is well that the subject has not been treated by means of improvements introduced into his methods, but has been investigated in an independent manner.

A. T. Shearman.

Aristotle, *De Sensu* and *De Memoria*. Text and Translation, with Introduction and Commentary, by G. R. T. Ross, D.Phil. (Edin.). Cambridge University Press, 1906. Pp. 286, three Appendices, Greek and English Index.

This book may be heartily recommended to all students of Aristotle, and Dr. Ross is to be congratulated on the excellence of his work. No one who is familiar with the *De Sensu* and the *De Memoria* will expect to find himself in agreement on all the details with any editor; but Dr. Ross has made a vigorous and a careful attempt to place the main difficulties clearly before the reader. The result is a book, which covers a very wide field and is on the whole excellent; but which (perhaps inevitably) contains some few mistakes and is somewhat uneven in its workmanship.

In this review I propose, in gratitude to Dr. Ross, to examine his work in some detail. And though I shall be forced to dwell upon points of disagreement, it is to be understood that I regard his book as, substantially and on the whole, a valuable contribution to the study of Aristotle.

I. *The Introduction* (pp. 1-40) contains much good material: the pages on "Colour" (pp. 20-23), and the summary of the teaching of the *De Memoria* (pp. 34-40), deserve special praise. But the treatment is at times so compressed as to be obscure, and there are statements which are at least misleading, if not wrong.

Thus, page 5, line 13, "all the *πάθη* (with the exception of *νοῦς*)" suggests that *νοῦς* is a *πάθος*. Dr. Ross refers to *De Anima* 413 *a* 7; but Aristotle is there talking not of *πάθη*, but of *parts* of the Soul. It appears, however, from page 6, lines 18-20 and from page 249 (with which *contrast* the remarks about *νοῦς* on p. 268) that our editor holds a very unusual view as to Aristotle's doctrine of the *νοῦς* in man. So far as I follow Dr. Ross' meaning, I think he is clearly wrong; but as he nowhere in this book states the grounds on which he bases his view, it is impossible to discuss it here.

On page 5, lines 26 ff., we are told that "*ἐντελέχεια* . . . properly (like *ἐνέργεια*) refers to something mental". This statement is repeated on page 18, line 19; and on page 22, line 15, we hear that an *ἐνέργεια* is "something not physical at all". I do not think Dr. Ross himself attaches any very definite meaning to these amazing statements, and my suspicion is confirmed by his note on *ἐνεργεῖν* (p. 149) and on *ἐνέργεια* (p. 274, last two paragraphs). In these notes the doctrine—whatever its precise significance may be—is apparently recanted. We may, however, trace the origin of his error in the note to 436 *a* 5 (p. 123, last two lines, and p. 124). Here he quotes from Alexander's commentary on the *De Sensu* (Wendland's edition, p. 4, l. 5). Wendland reads *κυρίως γὰρ πρᾶξις λογικὴ ἡ ἐνέργειά ἐστιν*, but notices in his *apparatus criticus* that A *a* omit *ἡ*. A study of the passage shows that the retention of *ἡ* is

impossible; for it makes nonsense of Alexander's argument. We must either excise ἡ altogether (regarding it as a duplication of the final η of λογική), or transpose it, reading κυρίως γὰρ ἡ πρᾶξις λογικὴ ἐνέργειά ἐστιν. Alexander's point is: "Aristotle here, as elsewhere, is using the term 'πρᾶξις' in a wide sense. For in the strict sense 'πρᾶξις' is *not* equivalent to ἐνέργεια (as it is here), but only to a determinate kind of ἐνέργεια, *viz.* to λογικὴ ἐνέργεια, *i.e.* that kind of ἐνέργεια which is exhibited only by beings possessing λόγος." Hence the passage from Alexander—the only passage which Dr. Ross adduces in support of his strange view—proves, if it proves anything, that ἐνέργεια *does not* "properly refer to something mental".

On page 11, lines 12-14 (*cf.* line 9), Dr. Ross appears to suggest that the λόγος τῆς μίξεως constituting σάρξ is a balance of *equal* amounts of the four constituent elements. For this there is surely no evidence? Perhaps I have failed to follow Dr. Ross' argument here. I do not think he has made his contention very clear.

On page 23, note 2, Dr. Ross speaks as if it were doubtful whether the distinction between white and black as διακριτικὸν and συγκριτικὸν ὄψεως is pre-Aristotelian. But of course the distinction is used by Plato, and used as a familiar and commonly accepted theory.

Finally, a word of protest must be made against Dr. Ross' use of the term 'concept'. As applied to the philosophy of Plato and Aristotle, this term is most misleading. The mischief begins with Zeller and his pupils, who applied the Hegelian term 'Begriff' *unintelligently e.g.* to the Platonic theory of εἴδη. As Hegel employed the term, 'Begriff' was a good equivalent for εἶδος in Plato and for τὸ τί ἦν εἶναι in Aristotle. But Zeller and his pupils employ 'Begriff' in the vulgar sense of 'conception' (= νόημα), and thus, *e.g.*, accuse Plato of 'substantiating mere conceptions,' etc. The term 'concept' is exposed to the same misinterpretation as 'conception'. There is nothing gained—and much endangered—by expressions like the following: "It is the sense or its concept which is non-quantitative" (p. 17, l. 14): "That [*i.e.* νοῦς in the sense of "the highest faculty of all"] seems to be the apprehension of concepts in abstraction from the imagery, the sensuous setting or ὕλη by which they seem generally to be attended. . . . Such simple concepts seem to form the starting point of all scientific knowledge . . ." (p. 131, ll. 20 ff.).

II. *Translation and Commentary on the* De Sensu (pp. 42-99 and pp. 121-243). Students will regret that Dr. Ross has not reproduced Biehl's *apparatus criticus* throughout. He does so only where he himself feels a doubt about the reading. But important variants occasionally pass unnoticed (*e.g.*, p. 82, l. 18; p. 110, l. 18); and, after all, the reader ought to be allowed to judge for himself whether variants are, or are not, important.

436 *a* 7. πρώτων. Dr. Ross' note (p. 125) is unsatisfactory. In the well-known passage, which he quotes from the *Post. Anal.*

(73 *b* 33 ff.), '*πρώτου*' refers to the *subject* of the judgment, not to the predicate. Its meaning is clearly explained by Aristotle a few lines further on, and again at page 74 *a* 36 - *b* 2. Hence Dr. Ross' statement (p. 125, l. 14), "To be *πρῶτος* then is to be *ἴδιος*," does not follow from the passage which he quotes. Later in the same note he appears to approve in some degree of Ziaja's interpretation, which can only be characterised as wild. Or does he really suppose that "*περὶ τῶν πρώτων*" in this passage could by any possibility mean "concerning the former"?

437 *a* 13. As Biehl (and Dr. Ross) reads this passage, the words '*ἀκουστὸς ὤν*' seem pointless. If the comma be read *before* *ἀκουστός*, instead of after *ὤν*, the argument becomes clear and significant. "Speech," Aristotle says, "contributes to the development of intelligence, not *quâ* sound, but *quâ* meaning. Speech *per se* (*i.e.* meaning) is not apprehended by the sense of hearing. We *hear* sounds, not the meaning which they convey."

437 *a* 22. Aristotle is here talking of the tendency of earlier inquirers to connect the organs of sense with the elements (Earth, Air, Fire and Water) *as they conceived them.* Dr. Ross' note (p. 133), though excellent as a statement of *Aristotle's* theory of the elements, is irrelevant.

438 *a* 9, 10. Dr. Ross translates, "But he seems to have attained to no clear general theory," etc. This does not quite give the point. The Greek means "No clear general theory was yet in existence . . ."

438 *b* 24. Dr. Ross' note (p. 146) does not make it sufficiently clear whether Hammond is translating the variant ('*αὐτὴν δυνάμει*,' omitting *δ*) or has simply blundered.

On 439 *a* 17, there is a very excellent note (pp. 149-150) in which Dr. Ross emphasises the difficulties in Aristotle's conception of the relation of the *αἰσθητά* to *αἴσθησις*.

439 *b* 14 (see the note, p. 154). The distinction between *αὐτῶν τῶν διαφανῶν* (Air and Water) and 'Bodies which have a colour of their own' (*ὅσοις φαίνεται χρῶμα ἴδιον ὑπάρχειν*) is clear in the Greek. But the words *κατὰ τὸ ἔσχατον* should, I think, be taken with *ὁμοίως πᾶσιν ὑπάρχει*, if justice is to be done to Aristotle's argument. This way of reading the passage does not in the least involve—as Dr. Ross' note suggests—any confusion of the distinction in question.

439 *b* 16. *ἔστι μὲν οὖν* . . . The new paragraph should begin *before* these words and not in line 17 with *ὥσπερ οὖν*. Dr. Ross has been misled by Biehl; and the mistake has induced him to translate *μὲν οὖν* as "Consequently". He falls into the same error in 440 *a* 16, where *μὲν οὖν* is rendered "Thus," and the whole sentence becomes meaningless.

440 *a* 16-21. Dr. Ross (p. 156) finds it "difficult to see what connexion this paragraph has either with what precedes or what follows". His difficulty originates with his mistranslation of *μὲν οὖν*.

I should suggest that the connexion is as follows: Aristotle has stated two theories to account for the diversity of colours, viz.

that of *Juxtaposition*, and that of *Superposition* where one primary colour shines through another. He wishes to overturn both these theories in favour of a third—that of μίξις. And he begins by showing that the Juxtaposition theory is inferior to the Superposition theory, and must therefore be discarded. In order to show this, he inquires how the action of colour in producing our perception must be conceived *on any and every* theory of colour. Colour, he says, cannot be conceived to produce our perception by Effluence, but by Motion imparted to a medium and, through that, to the eye. But if so, he urges, the Juxtaposition theory clearly breaks down; for it would involve the postulate of an imperceptible time.

I should translate 440 *a* 16-21 thus: "Now to maintain, in common with the early philosophers, that the colours are effluences, and are seen owing to a cause of the efflux-type, is absurd. For in any case [*i.e.* even if they are effluences] it is by contact that the colours must produce our perception of them. Hence it is better to say at once that our perception is generated by the movement which the colours impart to the medium between the sense and the object: *i.e.* by contact (of colour and medium) and not by effluences (*i.e.* contact of colour and eyes)."

440 *a* 29-34. Dr. Ross' translation of this difficult passage depends upon his rejection of Biehl's reading (τις . . . μίξις.), and his acceptance of Simons' "τίς . . . μίξις;" Though I hesitate to dogmatise on a matter of this kind, I must confess that Simons' reading seems to me to give impossible Greek. If we accept Biehl's reading (τις . . . μίξις.), and treat κἀκείνως—ἐπισκεπτέον (ll. 31-34) as a parenthesis, it is possible to extract the following argument from the passage. Aristotle is urging that the Juxtaposition and the Superposition theories of colour cannot account for *real* compound colours. They appear to do so only on the supposition that the minute components are *at a distance* indistinguishable, *i.e.* that there is an apparent, though not a real, μίξις. According to these theories, if we saw accurately, there would be no μίξις, but Juxtaposed or Superposed distinct components. Aristotle in effect points out that this means that *for accurate vision* there would be no 'compound colour'. Even on these theories (as he expresses it) a kind of μίξις—viz. an illusory appearance of μίξις—is postulated as the condition of the apparent compound colours.

441 *b* 25. In his note (p. 169) Dr. Ross says that the first transition in sensuous process "is effected by the parent . . . and *is the creation of a being with fully developed sense-faculties*" (italics mine). Is not Aristotle's doctrine that the transition from δύναμις to ἕξις in the case of αἴσθησις is pre-natal, *i.e.* takes place during the period of gestation?

443 *b* 9. ἀλλὰ μὴν . . . Dr. Ross' translation ("Indeed") fails to bring out the logic of the passage. Aristotle argues, "If (as I am maintaining) *x* is the case, clearly *y* would necessarily follow. *But now y* is actually found. Hence *x* is confirmed."

444 *b* 9. This should, I think, be translated "Fishes and the whole insect-tribe perceive accurately even from a distance, owing to the species of odour connected with nutriment," etc.

445 *b* 3-18. Dr. Ross (see his notes, pp. 195, 196) does not throw the logical structure of this passage into sufficient relief, though he appears to interpret correctly.

The question is "Can sensuous *qualities* be divided *ad infinitum?*" The answer suggested is "No". For an affirmative answer would involve infinite divisibility of the sense, and perceptibility of the infinitesimal *quanta* to which the infinitesimal sensuous qualities attach (ll. 7-11). This conclusion cannot be avoided by saying "Though infinitesimal sensuous qualities imply infinitesimal *quanta*, the latter need not be perceived"; for, if this were true, (*a*) the perceptible thing would consist of constituents not themselves perceptible, and (*b*) there is no faculty with which we could discriminate these supposed imperceptible infinitesimal *quanta* (ll. 11-18).

446 *a* 18. Dr. Ross in his note (pp. 203, 204) quotes *Post. Anal.* 84 *a* 14 ff., but misinterprets it. Aristotle in that passage is summarising a doctrine which he had stated more clearly and fully in 73 *a* 34-*b* 3. There can be no doubt as to Aristotle's meaning. 'Essential Attributes' (*τὰ καθ' αὑτὰ κατηγορούμενα*) are

(i.) constituent elements of the *τί ἐστι* of a thing, which are therefore contained in the thing's definition (or *λόγος*). Thus '*πλῆθος*' is contained in the definition of 'Number' (*ἐν τῷ λόγῳ τοῦ ἀριθμοῦ ἐνυπάρχει*), and is therefore a constituent element of the *τί ἐστι* of Number. *πλῆθος* is predicated of Number as an essential attribute of it (*ὑπάρχει ἀριθμῷ* as a *καθ' αὑτὸ κατηγορούμενον*):

(ii.) *propria* (*τὰ καθ' αὑτὰ συμβεβηκότα*), which follow necessarily from the *τί ἐστι* of a thing, but are not contained in its definition, *i.e.* are not constituent elements of its *τί ἐστι*. In this sense of 'Essential Attribute,' 'Even or Odd' is an essential attribute (*i.e.* a *proprium*) of 'Number'. Every Number is even or odd, *i.e.* 'even or odd' *ὑπάρχει ἀριθμῷ*. And 'Number' is 'contained in' the definition of 'Even' and of 'Odd' (*ἐνυπάρχει αὐτὸς ὁ ἀριθμὸς ἐν τῷ λόγῳ αὐτοῦ*, viz. *τοῦ περιττοῦ*, 84 *a* 16).

In 84 *a* 14, *ὑπάρχουσιν* is the dative plural neuter of the participle, governing *αὐτοῖς*, as is evident from Aristotle's illustration. Dr. Ross wrongly takes it as indicative present, and thus misinterprets the passage. He makes the amazing statement (p. 204) ". . . odd *ἐνυπάρχει* in the definition of Number, while Number *ὑπάρχει*—belongs to, or is a predicate of, odd". Aristotle's doctrine is "Number *ἐνυπάρχει* in the definition of 'odd,' while 'odd' *ὑπάρχει*—belongs to, or is a predicate of, Number".

447 *a* 19. *μᾶλλον κ.τ.λ.* I cannot see that *De Anima* (402 *b* 21 ff.), which Dr. Ross cites in his note (p. 217), has any bearing whatever on this passage. *Here* Aristotle says: "We perceive a thing most clearly when it is not mixed with other things—*e.g.*, neat wine more clearly than wine mixed with water' In the *De*

Anima (*loc. cit.*) he says: "Knowledge of properties contributes to our knowledge of the Substance, of which they are the properties".

448 *a* 18. οἷον τὸ γλυκὺ καὶ τὸ λευκὸν ἀλλ' ὡς σύστοιχα, γένει δ' ἕτερα . . . Dr. Ross translates, "*e.g.* sweet and white, which, though corresponding to each other, nevertheless are heterogeneous"; but I cannot believe that he would defend this translation of ἀλλ' ὡς σύστοιχα. Should we read καλῶ σύστοιχα?

448 *a* 21. Translate, "Some musical theorists maintain": Dr. Ross' translation takes no account of τῶν.

The long note (pp. 228-234) deserves a special word of praise.

449 *a* 18. The note (p. 242) on the antithesis between τὸ εἶναι and λόγῳ is not convincing. Dr. Ross says τὸ εἶναι . . . "is rather 'aspect of existence'; we might almost say 'existence for consciousness'. τῷ εἶναι almost = notionally . . ." etc. 'Almost' suggests the famous 'Almost' of the New Testament. I am glad that Dr. Ross does not *quite* bring himself to say these things.

III. *De Memoria* (pp. 108-119 and pp. 244-286). Both translation and notes on this treatise are excellent, and I have very few criticisms to make.

The note on 449 *b* 34 (pp. 248, 249) is not convincing. But the whole subject of ἰοῦς bristles with difficulties and controversial matters, and it is perhaps hardly fair to demand more than Dr. Ross has given.

451 *b* 31. λέγω δὲ . . . Dr. Ross' translation seems grammatically impossible. The variant (πῶς λέγει . . . L S U) is not noticed; but it does not help us. Perhaps λέγω is equivalent to λέγουσι, "one states the next-in-order without a previous search".

453 *a* 2 (and *cf.* the note, p. 284). ὁδήποτε is, of course, accusative neuter, not nominative masculine, as Dr. Ross' note seems to imply.

453 *a* 12. Dr. Ross in his note (p. 284) gives a somewhat misleading account of Aristotle's conception of συλλογισμός. Does not Aristotle—either always or as a general rule—regard συλλογισμός as a process which, starting with a suggested conclusion (a πρόβλημα), looks for the middle term (or terms) to mediate the connexion between subject and predicate thus tentatively affirmed?

I have noticed a few misprints: page 24, line 3, psychics (*read* 'physics'); page 88, line 2, αὐτοῦ (*read* αὑτοῦ), and page 96 footnote, line 5, η (*read* ἤ).

HAROLD H. JOACHIM.

The History of English Rationalism in the Nineteenth Century. By ALFRED WILLIAM BENN. 2 vols. London: Longmans.

THIS book is one particularly hard to review, for though ostensibly a history it is best described, in spite of the author's disclaimer, "as a contribution to the controversial literature of Rationalism"

And so it is impossible to speak one's mind concerning it without seeming devoted to what may be termed "irrationalism". One may, therefore, be forgiven if he declines to appear what he is not, and says so frankly. Mr. Benn himself can speak plainly, and may well bear plain speech in return.

At the very outset a distinction is drawn between "rationalism" and "rationality," which is said to be "conscious and avowed self-consistency" and to "embrace practice as well as theory"; while "rationalism" is pure theory which "may or may not influence practice". The distinction as here taken is unreal. "Rationalism" is more than theory; it is a critical method embodied in a "practice" of the most drastic kind; for it may involve the denial of "religious beliefs, especially as presented under the organized form of theological creeds". Yet I can cordially congratulate Mr. Benn on his doctrine of the reason, or what he calls rationality which is indeed most orthodox. Martin Luther said that reason was the pre-eminent attribute of man, "his best and most divine" faculty, shining "in human life like a sun, and reigning over it even as a god". On the same ground the Reformed Theology said that Nature was founded in and by the reason of God, which it was the highest impiety to deny. And so the Reformed Theologians used to describe God as the "Summum Bonum," whose being made it the one good and dutiful thing in man to live according to Nature, and both to act and to think in harmony with its laws.

The "Rationalism" of Mr. Benn may be very different from his rationality; and to an exact account of it and the idea it stands for, a more detailed discussion of its philology and historical meaning would have been helpful as well as significant. It is as regards origin a comparatively recent term: and has to be explained rather through Latin theology, especially as articulated in Germany, than through the French tongue, whether as spoken or written, whether introduced here directly or indirectly like so many of our Latin words and idioms through the Normans. We could hardly say that it was known in the English philosophy or literature of the eighteenth century. It is not to be found in Johnson; the oldest reference in the *English Historical Dictionary* bears the date 1800, and is medical in both sense and usage; later indeed under 1828 there is a reference to a letter written in 1827 by Prof. Sach of Bonn, who speaks of the "common" or "*rationalismus vulgaris*" which characterised almost the whole theology of Germany in the period of the "Accommodation". In the English thinkers it is never met with. Locke, Berkeley, Hume, Reid, Stewart use "reason," "reasoning," "reasonable," "reasonableness," but not "rationalism". Reid criticises Hume severely for calling reason "a passion," and teaching so "licentious" a doctrine as that the reason,—which adult men "of sound mind" have conceived "to have two offices, to regulate our belief, and to regulate our actions and conduct,"—ought to be "the servant of our passions". Kant was mainly responsible for its use as a term in English thought; knowledge of his system

caused its vogue. He distinguished between "Naturalism" and "Rationalism," especially as regards religion. He divided men into three classes: (i.) those who believed revelation to be necessary; (ii.) those who held it to be superfluous or unnecessary; (iii.) those who held it to be impossible. He termed these respectively, supernaturalists, rationalists, and naturalists. Bretschneider, who here followed Kant, distinguished these three; and said that we must not confound "Rationalism," which held revelation permissible, though criticising some of its doctrines, with "Naturalism," which had a double form, (α) a theological, by virtue of which all revelation, Christian included, was denied and natural religion alone affirmed, and (β) a philosophical, where one had no religion, and believed in nothing spiritual over Nature, whether termed god or soul, and so denied the reality of religious ideas. He said in stronger language than even Mr. Benn can use, that the philosophical sense of "Naturalism" was identical with "Materialism," a hateful confusion of terms, especially when done expressly to make contemptible the one idea by the help of the other. The distinction between the two was vital, as the theological sense might be religious, while the philosophical might be a pure negation. We may say then that in the minds of those who invented the words, "Naturalism" was a spatial term, referring to Nature as an extant system, which stood over and around and without man; but "Rationalism" is a word historical or temporal, excludes Nature and denotes that which in consequence of the evolution of man's nature has emerged in time, and is therefore while purely from himself yet believed to proceed from God.

I cannot, therefore, allow the correctness of the definition that "Rationalism is the mental habit of using reason for the destruction of religious belief," or as he says again "the tendency to use reason for the destruction of religious belief". This, even as a definition, cannot be understood unless one bears in mind Mr. Benn's identification of religious belief with theological dogma. To me they are contrasts, opposite in history, and in fact frequently opposed. "Dogma" as a term in theology, to which and not to religion it belongs, begins its fateful career in Christian thought not according to its use in the New Testament, but rather in Greek or Græco-Roman schools of philosophy. It denoted a positive law, *i.e.*, a legislative maxim made into a first principle by the act of a special school, and used as a test of agreement with its mind and character. When revived in modern times it denoted formulated religious belief, *i.e.*, religious beliefs made into a theology fixed and enforced by positive or legislative enactment. It thus stood not as the work of theologians, who were thinkers and scholars, but of Churchmen who thought they were statesmen, and imagined themselves as equal to making laws for human thought and objects for human reverence. Hence dogma was said to make all the difference between the orthodox and the heterodox. Before the Church had by legislation declared a religious belief in a particular form to be authentic and

real, it was permitted to man to think concerning it in the way that seemed right in his own eyes; but after the Church in its creeds, symbols, or canons had spoken, excommunication became possible, intellectual dissent was a kind of moral declension and offence; dogma was honoured by being made into a sort of deity, or a law of God which man was expected to obey. To differ from the Church was heresy, orthodoxy agreement with it. To identify dogma with religious belief is thus to forget its meaning and functions as well as those of belief. Now this interpretation of dogma is strictly historical; and the sense assigned to it underlies, though he was too skilful to let it appear in its cruder form, Newman's claim and argument in the *Essay on Development* and in the *Grammar of Assent*. "Dogma" thus involves the idea of a legislative Church; for doctrine turns into dogma the moment the Church ceases to teach, and becomes a body capable of framing and enforcing laws. Now this distinction is fundamental, especially if one means to write a history of criticism in a given age. To attempt it is as if one attempted to write the history of a people, and began by identifying its character and subconscious mind with its laws and legislation. How this primary error vitiates this book and yet pervades it like an atmosphere we can at once see. Our author says: "if it can be shown that theism was evolved out of the belief in fetiches, or totems, or powerful ancestral ghosts, or some other equally delusive imagination, then theism, whatever other reasons we may have for accepting it, can hardly appeal to the argument from universal consent once so triumphantly urged in its favour". But without attending to the broad premiss and the limping, not to say lame conclusion, let us merely note this: the belief in totems is one thing, the dogma concerning God is another; between these a great gulf is fixed, greater than scientific thought can cross. We do not simply ask, Why does man tend to believe in fetiches? Why does he develop the belief in God out of his belief in them? But we say, a man may perfectly believe that fetich worship was an early form of religion, and yet hold that belief in God is legitimate, though the dogma of how we must think concerning Him is a matter between man and the Churches. To destroy dogma is not the same thing as to destroy religious belief. Criticism may purify it, and purification tends to the conservation rather than to the destruction of life.

But we pass from these points, which may seem small, to others that are larger and are more typical. The title of the Book is *The History of English Rationalism in the Nineteenth Century*. Now here we have a double limitation, one of time, a history restricted to a single century, and one of place, confined to a single spot, England. Now neither is possible, and the book is interesting simply because it transcends the limits of its title. Scarcely a man here named began to be in the nineteenth century; those that do are characteristic only so far as they are formed by other than English or native influences. Thus Coleridge was born in 1772, and may be said to

have been educated and to have published his most independent and characteristic works in the eighteenth century. The same can be said of Jeremy Bentham, who was born in 1748; of James Mill, who was born in 1773, and who did so much to form the mind of his illustrious son, John Stuart Mill. If Carlyle, born in 1795, was a child when the nineteenth century opened, the same can hardly be said of Walter Scott, who did so much to shape the Anglo-Catholicism which here appears as reaction. If the relation in time breaks down, that in space is still less observed. Thought ever tends to become more and more cosmopolitan; the East invades the West as much or even more than the West invades the East. English is only a section of European thought, and a section that cannot possibly be cut out of the whole. England influenced France and Germany in the eighteenth century; it has been influenced by both in the nineteenth. Yet though our author is quite alive to our argument, he does his best to keep within the province he has so jealously marked as his own. But he cannot, though it is characteristic that he deals more severely with himself as regards time than space. Mr. Benn well knows the influence of France on England. Without Lamennais we should never have had Newman; without Reuss Old and New Testament criticism would have been appreciably poorer; without Renan everything most distinctly English in religious thought and inquiry would have been different. Yet while our author speaks of Renan's influence on a writer so strictly ephemeral as FitzJames Stephen, he says nothing as to his wider influence; and while Lamennais appears as an advocate of authority in religion, not a syllable is said touching the imitation of his argument and spirit by Cardinal Newman. So, too, as regards Germany, nothing is said to explain the influence of Kant's works, either as original or as recent; Strauss is credited with introducing to us the knowledge of Hegel, though Baur did more to introduce him than even his brilliant pupil. Nor is anything said about Holland, though there is a brief reference to the French translation of Kuenen; but Holland did more to show us the way in things critical and Biblical than either Germany or France. Spain appears in a reference to Buckle's *History of Civilization*, and his comparison of Spain and Scotland is deprecated and dispraised. Italy again appears simply as influencing two movements, the political and the ritualistic. If now there had been frank recognition of what is a simple fact, that we have here a history not of an English but of a world-wide movement, we should have had a fuller and a more living history. If we are to have a *seculum rationalisticum*, let us have it as a history of the eighteenth century, which has a far better right to the name than the nineteenth.

On many points I should have liked to notice the judgments of Mr. Benn. His book is interesting, yet its limitations are obvious. One of the most interesting points is his parallel between what was termed "Free-thought" and what he calls "Rationalism". An-

thony Collins' definition of Free-thought is as follows: "The use of the understanding, in endeavouring to find out the meaning of any proposition whatsoever, in considering the nature of the evidence for or against it, and in judging of it according to the seeming force or weakness of the evidence". I need not, however, call Mr. Benn's attention to the fact that this is not only in its theory of the proposition but of evidence, and its force and weakness distinctly rests on the philosophy of John Locke, without whose philosophy the whole movement in the eighteenth century would have been different. He says, too, that the leading Free-thinkers were Whigs. Left to myself, I should have said they belonged to the opposite section of political thought. His evidence is mainly taken from their adversaries. What Pope and Bolingbroke, what Hume and Gibbon were in politics we know; and it is a great mistake indeed to attribute a later temper to an earlier time. He gives, too, a list of names of writers of the eighteenth century, and infers that literature was mainly Irish, Scotch, or Continental. This is surely a mistake when we have men like Pope, Addison, Berkeley, Fielding, Gibbon, and rounding off the century Johnson. If we go with Arbuthnot into Scotland, we shall find Thomson, Robertson, Hume, Home, Boswell, Smollett. Mr. Benn's account of "Positive" and "Positivism" seems to me more popular than scientific. The term is to be understood through Roman Law which opposed the *Jus Positivum* to the *Jus Naturale* rather than through any analysis of the positive man.

If this notice has been mainly occupied with indicating what I consider defects in this book, it must not be thought that it is all defective to me. It has been interesting, and from cover to cover instructive. While it would not be just to speak of it in other terms than I have found it to be, yet it is an interesting book that must be read, as addressed to men who think, with discrimination and care.

A. M. Fairbairn.

An Introduction to Logic. By H. W. B. Joseph. Clarendon Press, 1906. Pp. viii, 564.

This is a most important work. Mr. Joseph modestly calls it an introduction, and certainly in some respects the book maintains an introductory character throughout, for the writer steadfastly refuses to be tempted by the many opportunities for digression into the field of general metaphysical controversy. But while keeping to the high road and following the guide-posts of historic doctrines, Mr. Joseph has been doing something more than merely following a beaten track; he has relaid and made more stable much of the way, and has done not a little towards extending it, building out firmly into that treacherous country which it must ultimately traverse.

Undoubtedly the book gains immensely in coherence and point by being written as an introduction; and a fitting introduction it might be for students of maturer powers or thinkers unacquainted with Logic, who are yet familiar in a practical way with the procedure of more than one science. But it has a completeness and thoroughness that will make it too formidable for the average mind at the age at which the study of Logic is usually begun. Yet there is nothing in the way in which the subject is presented that is formidable. Throughout we have an absolutely unaffected style and a most admirable lucidity of exposition, and this delightful clearness of thought appears not merely in the phrasing and structure of the individual paragraphs but in the way in which the whole discussion is ordered. In particular the development of the thought in those chapters which deal with inductive inference shows with what care Mr. Joseph has attended to the building up of a coherent notion in the reader's mind.

The originality of the order and grouping of topics may perhaps surprise some who expect to find repeated here the ordinary routine of the Logic text-book. There is, for example, no special and separate discussion of the 'Laws of Thought'; some of the historic theories of predication receive but scant notice. We have even no definite pronouncement on the doctrine that 'the subject of every judgment in Reality'. If he wished to do so, Mr. Joseph could probably justify most of his omissions by pointing to the introductory nature of his inquiry. There is much profit arising from this sagacious elimination of controversies that do not further the purpose in hand.

The importance of this contribution to the science of Logic will be recognised by all who realise that now for the first time do we have a published exposition of the subject by a logician who is as thoroughly familiar with the genuine Aristotelian doctrine as with the problems which modern thought has raised, largely in ignorance that many of them had already been propounded by Aristotle himself. So far at least as England is concerned, it would appear as if the existence of the *Posterior Analytics* had been discovered not in the thirteenth century but the other day only. While in this volume there is no parade of Aristotelian learning, the ease with which the writer moves about among the various treatises of the *Organon* or from the *Organon* to the *Metaphysics* (I notice a trivial error in a citation on p. 43) proves him to be an expert of the first rank in this department of knowledge; the long note on the Aristotelian sources of the *Dictum de Omni* on pages 274-277 is a fresh contribution to the subject. Again, an illustration of the happy combination of erudition and philosophic insight which pervades this book is furnished by the brilliant chapter on the Predicables.

On the other hand, Mr. Joseph's acquaintance with the inductive logicians from Bacon downwards seems no less intimate. I can think of no better account of the historical development of the modern doctrine than is contained in chapter xviii. (speaking of

historical matters, why does Mr. Joseph fail to refer to Descartes' strictures on the syllogism and his theory of mathematical deduction?) Again there is probably no critic who has done J. S. Mill so much justice. In a way, no doubt, Mr. Joseph's treatment of the famous 'inductive methods' is revolutionary. Hitherto the practice in almost every manual has been, in spite of the way in which the fire of idealist artillery has riddled the empirical philosophy, to send the whole fleet of 'methods' and 'canons,' patched and tinkered up as best may be, out to sea once more. In future this will be impossible; nor will there be any reason for attempting to do so, for Mr. Joseph has supplied the constructive work which previous critics omitted. Instead of the canons of the five now traditional 'methods' with all their inadequacy and ambiguity, there appear four 'rules of cause and effect,' expressing in a more coherent way the truth previously dispersed among the 'methods'. The way in which these rules are applied is admirably worked out in the chapters on reciprocating and non-reciprocating causal relations, chapters which are characterised by a delightful freshness and finality. Now, in this part of the book we find no obliteration of Mill by a general formula, but a re-arrangement of his material; no persecuting criticism, but a more felicitous statement of the truths Mill was trying to express. At the same time the illustration of logical principles by concrete examples from the sciences is more vivid and dexterous than that in the best of the writers of the inductive school, strong as has been this feature in the work of many of them.

Succinctly put, Mr. Joseph's theory of induction is, that *formally* inductive inference is always deductive in character; it is the application of a canon or rule, a 'topic' in the Aristotelian sense, of cause and effect, and it proceeds by means of a disjunctive argument in the minor premiss by which non-causal concomitants of an effect are eliminated. But it is not a deduction amounting to demonstration; its premisses are not 'appropriate principles'. Such inference is, nevertheless, genuinely inductive in the sense of being a process involved in the transition from particular perceptions to the knowledge of a general principle. Consequently Mr. Joseph supports Mill in talking about a 'deductive method of induction'; deduction of the consequences of a hypothesis for the purpose of comparing them with fact is a step towards the establishment of that hypothesis apart from its deduction from one still higher, and hence falls within the province of induction. Finally, if we define induction (as on p. 422) as "the whole process of eliciting from facts the principles that account for them," there are other operations than inference entering into induction, namely analysis of the phenomena and the suggestion of hypotheses; "new ideas are scarce; inductive reasoning, if the material were given all ready prepared, is easy".

It is on his doctrine of inference and of syllogism that, if anywhere, I should like to join issue with Mr. Joseph. It is true

that he makes an excellent case against Zabarella and any one else who would make every syllogism an application of the *Dictum de omni et nullo*. But, if certain arguments are best expressed in the second and third figures (the fourth is, very properly, rejected), is not the logician bound to try to display the unity pervading the three axioms which he has thus left on his hands? The failure to construct a single scheme co-ordinating the various types of inference becomes more apparent when we ask the wide question—'What is common to syllogism and the various other types of deductive inference which (according to the account here) are distinct from it?' If syllogism is itself not the general formula, we must provide another, or at least show in some way that the term 'deduction' is not used homonymously. Reasoning based on a quantitative axiom like that about 'things equal to the same thing,' is not syllogism, says our author; and the chief grounds of this statement are, that the axiom is not a *premiss from which* we draw our conclusion but a *principle in accordance with which* we reason. What distinguishes such a *principle* is its property of not requiring to be formulated in order that one may see the validity of the particular inferences which it covers, *e.g.*, A = B, B = C ∴ A = C. The same argument would make the validation of a syllogism in *Barbara* by an appeal to the *Dictum de omni* itself non-syllogistic, a result at which Mr. Joseph does not quite arrive. This distinction between premiss and principle is not followed up. Is it only a psychological distinction? Perceptive inferences, where the middle term is vague and undefined, present us with something at a lower level of thought curiously like the reasoning based on axioms. Or again are such axioms not the *first* principles (or an important class among them), the distinctive features of which Aristotle was so eager to discern? Must we have a fresh form of inference for every independent first principle, or is it not sufficient to distinguish as belonging to a special type of demonstrative syllogism those inferences which, if expressed syllogistically, have an axiom as major premiss? We must either do this or attempt to reduce to a system the chaos of first principles. But can it be reduced? Mr. Joseph shows how definition and classification have failed to cope with the irrational variety of the species that have come into existence through the fantastic workings of the generative impulse. He says that even the *theory* of definition breaks down. Does insurmountable irrationality confront us even in the domain of first principles—the sphere of νοῦς—and must all theory ultimately break down? To answer in the affirmative would be to show that a Bradleyan potion coursing in the veins can rejuvenate Logic for a brief spell only. Mr. Joseph seemed to have rediscovered the Aristotelian elixir. The fluidity of the genus which allows it to be modified differently in every species is, as Mr. Joseph well shows, nothing obnoxious to definition, and the uniqueness of the differentia, so significant of a real natural kind, does not make it unthinkable. Surely nothing but mere number should break down

the intellect. In conclusion I wish only to emphasise once more the notable qualities of this work—its originality, lucidity and fairness, and the interest which is imparted to every detail; there is not one barren or tedious paragraph in the book. The writer has been successful in his vindication of Logic against Jowett's famous stricture. Nor could such a criticism as has been more lately passed —that it is an "analysis of low-grade thinking"—hold good of the subject expounded here.

G. R. T. Ross.

VII.—NEW BOOKS.

Rudolf Eucken's Philosophy of Life. By W. R. Boyce Gibson, Lecturer in Philosophy at the University of London. London: A. & C. Black, 1906. Pp. viii, 168.

The present writer had some hesitation in undertaking this review owing to his limited knowledge of Eucken's works, but anxiety on this score was allayed by the credentials of the volume. Mr. Gibson has discussed philosophical matters with Eucken, and the Professor himself revised his proofs. We may take it, therefore, that the book is recognised by Eucken as giving a correct and adequate account of his *Philosophy of Life*.

These lectures written by one who "has a profound sense of the importance of Eucken's teaching for philosophy, for religion and for everyday life," successfully achieve their purpose of interpreting his philosophy "in the light of its own fundamental principles". There was room for this well-informed exposition, for Eucken is a somewhat baffling thinker to those who study him for the first time. One finds little in the way of close argument and logical deduction in his writings; and the point of view is unusual and hard to grasp. In fact Eucken, though he has learned in various schools, calls no man master. In some ways he resembles Browning. Both men are optimist at heart, although they see the evil that is in the world: their outlook on human life and destiny is deeply religious: and they are apostles of 'the strenuous life,' their ideal the spiritual warrior who

> "Never dreamed, though right were worsted, wrong would triumph,
> Held we fall to rise, are baffled to fight better,
> Sleep to wake."

Eucken, as many probably know, rejects both Naturalism and Intellectual Idealism: he would substitute for them the 'vitalistic' method of dealing with philosophical problems. It is his aim to take these out of the domain of mere theory and treat them as elements in culture-systems or life-philosophies. An instructive illustration of the new method is its treatment of history. History must be more to us than a simple succession of facts, it must be re-valued as a present experience. "The fact must become our present, the event an experience, and the 'present experience' must be that of our timeless nature" (p. 26). Eucken urges that, if the fact is to yield its vital meaning to the present in an abiding form, it must cease to be isolated fact, and be realised as an element in that living whole or *Lebenssystem* from which it was abstracted. One can sympathise with this demand for a vital interpretation of history and yet hold that what is here sought to be achieved is an ideal never at all fully realised. Take the *Lebenssystem* out of which a religion arises. To determine the facts is hard, and these acquire different values as they are viewed through later stages of culture. We can only ask what

warrant is there for saying that their timeless fulness of meaning is realisable at any one stage.

Mr. Gibson has some interesting remarks on Eucken's method of criticism, which always strives to be vital and immanent in contrast to the standpoint of the external spectator. The *Lebenssystem*, or the *Syntagma*, as the vitalising principle, gives the key to the meaning; and we can either proceed reductively, referring the facts to the system, or show how the system develops itself into its details. This method Eucken terms *Noological*. Again, a *Syntagma* as vital strives to extend itself and aims at independence, and Mr. Gibson shows how in this *Philosophy of Life* the *Syntagma* of Intellectualism asserts itself against that of Naturalism, and how finally the richer *Syntagma* of Personality supersedes these partial life-systems. The following observation is as just as it is penetrating: "The strength of naturalism is the weakness of the world's spiritual life". Eucken lays stress on the negative movement of the spirit away from nature in its quest of freedom, and for this movement naturalism gives no scope. In Hegelianism negation is essential, but it is fairly contended that such negation is abstract and is not the movement of free individual initiative. Human endeavour is an indispensable factor in overcoming the oppositions and entanglements of life. The break with the world and the impulse after freedom appear as a development from individuality, which is already a 'being for self,' towards the deeper and richer life of personality which has its ground in the Eternal Life. From thence the human spirit, having found its true centre and stay, returns on the world to work out its freedom in remedial activity. For Eucken self-consciousness is self-activity, and action is the essential expression of personality, "which includes and envelops an objectivity within itself, and transfigures it in so doing" (p. 94). Of this prosperous life freedom and truth are aspects: the criterion of truth is spiritual fertility, the stress being laid rather on the satisfying immanence than the working value. As Mr. Gibson points out, Eucken's whole philosophy is a philosophy of freedom: and from another aspect it is a theological idealism, for it declares that an effective ideal for persons must be a Person enveloping the self (p. 103).

In these lectures brief criticisms are given here and there, and of these we single out two as of most importance. Mr. Gibson finds fault with Eucken for his neglect of psychology, and points out that this is the result of his having identified psychology with the abstract and atomistic method of natural science. In the best recent psychology, however, a mental process is interpreted teleologically as an apperceptive system or unity of interest. This is in close accord with the idea of a *Lebenssystem*, and it is pertinently argued that on these lines Noology and Psychology might be brought into vital and fruitful relationship. Mr. Gibson's second criticism is, that Eucken inconsistently holds that our highest spiritual experience is not capable of rational interpretation, and he says this ultimate irrationalism must react unfavourably on the *Philosophy of Life* as a whole. He thinks that Noology must have what corresponds to the categories of the Idea in Hegel, and should be self-interpreting throughout. Leaving out of sight Eucken's consistency, we ask, Is there any self-revealing category by which we can express adequately our highest experience? Such experiences are best regarded as values, and we hold that rationality and value cannot be fully unified by us. Mr. Gibson's standpoint is that of the experient subject; but the question remains whether the category by which one subject tries to express his deeper life-experience would be recognised as valid by another for himself. One may well doubt this: yet here it must be

asserted, unless it is frankly proclaimed that the 'fit of a man's philosophy' ought to be as individual as the 'fit of his clothes'! In which case it were needless to try to make others think as we do.

Had space permitted I would have tried to show that Eucken's aversion to close thinking and his failure to meet obvious criticisms are more serious defects than Mr. Gibson is disposed to admit. And as an illustration of this I meant to refer to unsatisfactory features in his treatment of the ideas of 'freedom' and 'eternity' in one of his latest works. It must suffice, however, to mention two further points. The statement is made (p. 166) that "Eucken's philosophy is essentially a Christian philosophy of life". Perhaps it might have been added that this philosophy involves a revaluation of the historic element in Christian faith as commonly understood. Again, Mr. Gibson attaches slight importance to Eucken's distinction between 'universal' and 'characteristic' religion (p. 153). Certainly the validity of the distinction is not so apparent as that drawn by James between institutional and personal religion. But it coheres well with Eucken's general philosophy, and its value for us should depend on the value we set on that philosophy.

Though we are doubtful that Eucken's system will furnish "a rallying point for the idealistic effort of the present day," we are certain he is fortunate in finding an interpreter so sympathetic and yet discriminating as Mr. Boyce Gibson. We have read the book with much profit, and others, we think, will do the same; for it is instructive and stimulating in a high degree.

G. Galloway.

The Subconscious. By Joseph Jastrow, Professor of Psychology in the University of Wisconsin. London: Constable & Co.; Boston and New York: Houghton, Mifflin & Co., 1906. Pp. ix, 549.

The words subconscious and subconsciousness have been used in very different senses by those who have attempted to attach any definite meaning to them, and by many others have been used in an extremely vague and confused manner. There was therefore much need of an attempt to diminish this uncertainty and vagueness by means of a critical survey of the various phenomena which have been held to imply subconscious mental process. This book will not, I fear, do anything towards bringing about this desirable result. In the preface the work is styled an "essay in descriptive psychology" which "is to provide a survey of a comprehensive aspect of human psychic endowment".

But though the greater part is descriptive, the last of the three sections into which it is divided is "theoretical," the author assumes an "architectural responsibility," and "endeavours to reach a conception of the constructive system that pervades the selected series of natural types which our descriptive survey has disclosed".

The descriptive survey is a useful compilation, but it suffers from the fact that in the author's mind the term subconsciousness has no clearly defined connotation. In part i. under the head of "the normal subconscious," processes of the type of the primarily and of the secondarily automatic actions. "the primary and the lapsed subconscious procedure" are described in detail; and in part ii. under the head of "the abnormal subconscious" are described dreams, the allied states induced by various drugs, and the facts which are commonly held to imply the disintegration of the stream of personal consciousness and the formation of a secondary stream of consciousness coexistent with the primary one.

But no clear guiding principle is discernible throughout these sections.

The author seems to have brought together nearly all the different kinds of evidence that imply processes to which the term subconscious has been applied. Instead of proceeding to examine these with a view to bringing out their essential likenesses and differences, the author has been content to leave them in one confused class of which the only common mark is departure in some degree from the type of the fully conscious process of normal waking life. On what other principle should dreams or the visions of the opium eater be classed with the performance of secondarily automatic actions?

At least three very different things are thus brought together: (1) the undiscriminated elements that introspective analysis may discover or develop in every sensory presentation; (2) the neural processes that underlie the associative reproduction of ideas; (3) the stream of secondary or co-consciousness implied by automatic writing and speech, by certain posthypnotic actions, and in other ways in such pathological cases as Prof. Janet's Leonie B. or Dr. Mortin Prince's Miss Beauchamp. (The latter author suggests that the term subconscious should be restricted to processes of this last class, and I would strongly endorse his recommendation, *cf. Dissociation of a Personality*, Appendix A.) Into the same class with these are put primarily and secondarily automatic actions, dreams, drug-visions and hallucinations. It is therefore inevitable that when the author proceeds to his 'architectural' task and attempts a theory of the subconscious no clearly defined result appears, and that when in the final chapters he refers to his theory of the subconscious as something already presented the reader is hopelessly perplexed to know what the theory may be. The nearest approach to a theory is the reference to the principle of dissociation. This principle undoubtedly offers the most promising line of explanation of the facts taken to imply subconscious process in the strict sense suggested above; but any theoretical treatment of this problem of the division of consciousness must set out with a consideration of, or at least some assumption as to, the conditions of the unity of the normal stream of consciousness, and this has not been attempted in this book. The author's 'architectural' section is hardly more than a restatement of the descriptions of the first and second sections in more generalised, more metaphorical, less direct language. Take for example the following passage which stands for an explanation of the greatly increased suggestibility which is the leading symptom of hypnosis: "It is the presence of normal initiative that prevents our muscular system from being played upon by any chance appeal, and reserves its use for the expression of our own will. With this disabled or suspended, by whatever means, the responsiveness to suggestion follows inevitably, and will proceed as far as the retained powers permit. Hence the wide range of suggestion in hypnosis, and hence also the liability of such developed automatism to involve as well loss of incorporation and orientation; for the tenantless condition of the brain reduces the psychic organism to a curtailed status, with restricted sensibilities, thought and will; and of which the abnormal, at times seemingly incredible, domination of imposed impulses is the most notable issue" (p. 501).

What does this mean? Does Prof. Jastrow mean to fall back on the savage theory of trance according to which trance is due to the temporary absence of the soul from the body? Or what is the tenant? Is it the 'normal initiative'? It is not meant to be the will, for the will is not absent, but only restricted. Or, if this reference to the tenant is metaphorical language only, what is the normal initiative? When the author 'explains' the increased suggestibility by the absence

of normal initiative, does he not merely reverse the more common procedure which consists in 'explaining' the absence of normal initiative by the presence of abnormal suggestibility. We are reminded of the 'virtus dormitiva'. The passage quoted is a fair sample of the author's style, which in itself is an interesting study. It makes great play with metaphor, simile and analogy, which in the descriptive section are occasionally used with happy effect. But in the theoretical or would-be explanatory section this style of expression is fatal to clear thinking. Take the following passage dealing with hysterical anæsthesias. "In the still more personally pervasive disintegrations of the mind, the detachment of the seceding state from the awareness of the life of its alternate—which may be one-sided or reciprocal according to the nature of the dividing lesion—carries the anæsthesia to its most intricate development. Throughout the series it plays a directive part, and establishes a failure of incorporation as a typical sequence of abnormal concentration. Of peculiar importance as evidence of such loss of privilege is the failure of registry by the incorporative self, and equally the indirect registry that ensues in spite of the psychic nullification; while the contradictions which the altered consciousness is forced to tolerate in order to keep faith with its imposed anæsthesias, yet further intricate a decidedly complex situation." I do not think that the difficulty I find in discovering the meaning of this and many similar passages is peculiar to myself. I think most English readers must find the style extremely difficult and distasteful. Perhaps it is better suited to more nimble-minded American readers, and perhaps my incapacity to cope with these elaborations of expression has prevented me doing full justice to the author's 'theory'.

W. McD.

Proceedings of the Aristotelian Society. New Series, Vol. VI. Containing the papers read before the Society during the Twenty-seventh Session, 1905-1906. London: Williams & Norgate, 1906. Pp. 402.

The first paper in this volume is by the President of the Society, Dr. Hastings Rashdall, on "Causality and the Principles of Historical Evidence". Maintaining that we can assume the uniformity of natural law, in the sense of mechanical sequence, only throughout a very limited portion or aspect of fact, and that beyond this the law of causality is not inconsistent with the modification of physical sequence by psychical conditions; he argues that, while on the one hand, alleged occurrences —and especially isolated occurrences—admittedly inconsistent with ascertained laws cannot be accepted on the strength of the same kind and amount of evidence as is required for familiar events, on the other hand, when whole classes of events such, *e.g.*, as those investigated by psychical research are recorded to have occurred at various times and alleged to occur still, there is reason for some modification in our conception of the laws of nature, and even in our conception of what a law of nature is, *i.e.*, the kind of causality it involves. Dealing with "Teleology," Mr. Shadworth H. Hodgson contends that while the assumption of teleology, in the sense of finality, *i.e.*, rationality or apparent design in the universe is warranted by the character of our own consciousness as directed to ends not yet realised, and the continuity of the content of all other consciousness with our own; yet, as such teleology belongs to the *nature*, as distinguished from the *genesis*, of existents, and accordingly has nothing to do with the question of their efficient causation or

conditioning, we are not warranted in applying the conception of real design or final causation (which tacitly includes that of efficient causation), *e.g.*, in assuming a reasoning analogous to our own as an efficient agency explaining the assumed rationality. Mr. G. E. Moore has a paper entitled "The Nature and Reality of Objects of Perception". His argument is, that since each person's observation of his own conscious states gives, by itself, no reason for his belief in the existence of other persons, this reason being given only by his observation of things other than his own states, we must assume the existence of such things if we are to have a reason for our belief in that of other persons; and as we have reason to suppose that *some* such things exist, whatever certainty there is in the one case belongs also to the other. Discussing the question, "Is the Conception of 'Good' Undefinable?" Mr. J. Solomon emphasises the fact that good (morally) is not simply a quality—like, *e.g.*, yellow—but is a relation to character. It is what satisfies the character. Hence it partakes of the permanency of character, and implies complexity and comprehensiveness—system. He affirms that moral goodness is *sui generis* rather than a species of a genus 'the good'. Mr. T. Percy Nunn treats of "The Aims and Achievements of Scientific Method". He finds that the differentia of science, as a conative process aiming at rendering the objective intelligible, is the presence of no motive except the *desire* to render it intelligible—no ulterior motive such as the use or value of the results for other interests or needs, *i.e.*, it is characterised by interest in the details of the objective as such, solely for the sake of understanding it. The paper contains an interesting historical portion on the use and nature of hypotheses. The next paper is "On a Certain Aspect of Reality as Intelligible," by Mr. F. Tavani. Defining *idea* as a relation of correspondence or reciprocal suggestion between a percept and a concept, he shows the *rôle* that such a relation plays in reality *qua* related to consciousness, and how it works in effecting an intelligible synthesis of reality as thus related. If we abstract from the objective character of such a relation and view it simply in its logical nature, we are likewise led to consider the idea as the unit and ultimate datum of reality as intelligible. On the subject of "Timelessness," Mr. F. B. Jevons argues that an examination of the various alternatives as to the relation between succession and simultaneity, and between the apprehension of them and their existence, shows that they are contradictory to each other, and that reality is therefore timeless. The next item is a "Symposium—Can Logic Abstract from the Psychological Conditions of Thinking?" Mr. F. C. S. Schiller contends that logic must explicitly take account of the psychological conditions of thinking, since these processes determine the actual meaning of judgments, and by trying to ignore them logic loses all vitality and touch with reality. Prof. Bosanquet maintains that, on the contrary, logic is able to abstract from such conditions, inasmuch as thought does not take its own proper nature from them. The psychological process is the logical process in disguised and inarticulate character—the logical process is the psychological process in its explicit and self-consistent form. Dr. Rashdall, answering also in the affirmative, bases his position on the contention that our purpose in logic is to attend to the aspect of truth or falsity apart from other aspects of the contents of consciousness, and that this distinction does not belong to the psychological attitude. The three main papers are followed by comments and replies. The concluding papers in the volume are by Dr. G. Dawes Hicks on "Sense-Presentation and Thought," and by Prof. Stout on "Neo-Kantism as Represented by Dr. Dawes Hicks". The former, founding on the distinction between the aspects of process and content in apprehension—that while the act or

process of apprehension is an existing state of mind, the content apprehended is not as such an existing fact—holds that no psychical state is directly or immediately known. A mental image, *e.g.*, is as much a content apprehended, involving an act or process of apprehending distinguishable from it, as is a logical idea. Further, all apprehension, even the most rudimentary, being a process of discrimination and relation, there is no distinction between sentience and thought as in any sense implying that the latter does not develop from the former. Sense-presentation and thought are alike in not being existent facts, but manifestations of existent facts, as these are discriminated in apprehension, and the distinction between them can be accounted for in spite of this agreement. Prof. Stout maintains that certain contents of consciousness —*e.g.*, painful feelings—are immediately apprehended as they are actually existing at the moment, and that to deny this is tantamount to destroying altogether the distinction between feeling and knowledge, and to asserting that the being and nature of all psychical states is wholly constituted by their being known. A reply to this paper concludes the volume. It may be noticed in closing that the present volume is double the size of last year's *Proceedings*.

The Argument of Aristotle's Metaphysics. By Edith Henry Johnson, Ph.D. New York: Lemcke & Buechner, 1906. Pp. 186.

The authoress of this book has done a real service to all students of Aristotle. She has given us the best account that is to be found in English of the main contents of the *Metaphysics*. There are many important points which the scope of her book has not allowed her to examine, and it is natural enough that there are not many of the *cruces* on which she has thrown fresh light. But within its limits her work has been done admirably. The unity of the *Metaphysics* is emphasised as it should be. 'Its very defects of form indirectly disclose the completeness of its argument. That it has preserved through, we know not what historical vicissitudes, the unity which it undoubtedly possesses, is due wholly to the powerful structure of the original thought. Aristotle's argument has survived a measure of literary disintegration which would have been fatal to one not genuinely coherent' (p. 12). Books E—Θ and Λ are described as forming the main structure of the *Metaphysics*. To this we would only add—what indeed Mrs. Johnson implies farther on—that B sketches a programme for the *Metaphysics* which tallies almost exactly with the completed work, and thus most certainly deserves to be treated as an integral part of the whole. The position of Book Δ is one of the most difficult problems connected with the *Metaphysics*. Mrs. Johnson suggests that it is 'a result of the decision in Book Gamma to consider the study of general terms a proper part of philosophy' (p. 16). This was probably the reason why those who put together the *Metaphysics*, anxious to get Δ in, and despairing of finding a really appropriate place, put it where it is; but no such connexion can be traced in Aristotle's own thought. I (Iota) is, on the whole, the book which fulfils this promise to discuss general concepts. Δ appears to have been originally a separate work, and as such it is cited in the lists given by Diogenes Laertius and Hesychius. Attention is rightly called by Mrs. Johnson to the fact that the false and the accidental, the last two concepts discussed in Δ, immediately play an important part in E. But this arrangement is hardly Aristotle's doing—E really requires a previous treatment of truth, at least as much as of falsehood. We must recognise again the work of a compiler, seizing

the slightest indication of an appropriate position for Δ, for which no position in the *Metaphysics* is really appropriate.

The connexion of Book A with the main subject (through its denial of the infinity of causal series) and that of Book I. (through its analysis of the concept of contraries—so closely bound up with that of change, the subject of H and Θ) is well brought out; and the general trend of thought is followed with great care, and with a due distribution of emphasis. A third of the whole space is allotted to an analysis of Z. And the analysis, here as elsewhere, is no bald summary. It is a thoroughly interesting representation of Aristotle's thought in modern language. The impossible attempt to get everything into a summary is not made. By omitting many of the details (always a dangerous experiment in the case of Aristotle, but done with good judgment in the present work) space is found for dwelling on the salient points and bringing out their permanent value. Mrs. Johnson realises that nothing in the *Metaphysics* at least, if anything at all in Aristotle, is of merely antiquarian interest,—that all is genuine thought which requires only patient understanding to exhibit its significance. We may mention especially the judicious passage (pp. 179-181) in which the astronomical theory of Aristotle is partially defended, and attention is drawn to the smallness of the extent to which his astronomical errors vitiate his general theory of the world.

In some points the book is capable of improvement. It would have been more useful to students if references had been given more systematically in the corresponding passages of the text. And occasionally there is some looseness or obscurity in the analysis. The value of Aristotle's account of his predecessors in Book A is somewhat underestimated. It is not 'impossible to determine' (p. 19) how far Aristotle is correct in his analysis of the origin of the ideal theory; passage after passage in Plato confirms his account. Nor does 'a closer scrutiny' (p. 28) of the opinions of the earlier philosophers really 'diminish the prestige of the Aristotelian account'. It merely shows that he described his predecessors from a very definite standpoint, and in language more technical than any they had invented. On page 31 the sentence beginning 'In any mode' is a somewhat slack summary of the important argument against an infinite causal series. Again on page 63 it is rather seriously wrong to say that 'Aristotle is not inclined to take the results of his analysis as indication of varying degrees of reality, or to erect what philosophically appears satisfactory into the sole or the most genuine existence'. Poor indeed would be Aristotle's opinion of metaphysics if the latter half of this sentence represented his view, and as to the former half, though he knows not the phrase 'degrees of reality,' what else is meant by such words as *πρώτως καὶ κυριωτάτως ὄν*, or by the whole argument of Z—Θ?

Occasionally too much is read into Aristotle's words. *E.g.*, on page 156 earth and fire are contrasted with the other elements in a way which the text does not warrant. It is true that Aristotle thinks earth and fire have more obvious proper movements than the other elements, but the others also 'hold within themselves a constant action,' and earth and fire are mentioned merely as examples of the elements in general. Again on pages 69 and 79 there are instances of commentary on what Aristotle might have said rather than on what he did say. But in the main this is a book of much thoroughness and of great value for any who wish to have a compendious view of the contents of the *Metaphysics*.

W. D. Ross.

Incubation, or the Cure of Disease in Pagan Temples and Christian Churches. By MARY HAMILTON, M.A. St. Andrews: W. C. Henderson & Son; London: Simpkin, Marshall & Co. 1906. Pp. 223.

Incubation, or the method by which people seek to entice dreams, visions, or communion with divine beings for the purpose of obtaining guidance, healing or other favours, forms the subject of a careful study by Mary Hamilton, Carnegie Research Scholar of St. Andrews. It provides matter interesting alike to the student of folklore, religion and psychology, but perhaps the main interest of the work lies in the fact that incubation is a cult which, by virtue of its origin, belongs to paganism, but which is still not only countenanced but encouraged in the twentieth century by two of the chief sections of the Christian Church. The author traces the history of the cult from the earliest times, showing that it seems to have been practised without interruption or undergoing essential change in pagan temples, in Christian churches of the Middle Ages, and in modern times. The earliest traces are perhaps recorded by Homer, but the chief centres of incubation were the temples of Asklepios, a Chthonian deity, one of the Panhellenic, not the Olympian circle, of comparatively late origin, and honoured chiefly as a physician; and an interesting array of his miraculous cures is given, gleaned from contemporary records.

Christianity probably supplanted the remote Olympian gods with little difficulty, but paganism made its last stand in the temples of the Chthonian deities whose general beneficence and gifts of healing had bound them closely to the people. The cult was not destroyed; it was transferred. It was no longer pagan gods who wrought the cures, but Christian saints. The methods are practically the same. As in the temples of Asklepios sacred ashes were taken from the holy altars, so the suppliant to the saint had to cure himself by the application of wax from the church candles. This continues down to the present day. In Greece the devout suppliant has recourse to incubation as a means of approaching the powers of heaven, and in Italy the custom still commonly prevails. The patient passes a night in the church, and during sleep he has a vision of some heavenly personage. In the morning he awakes cured. "There is no doubt that people, through all the centuries have been cured, and still are being cured of disease in ways which are independent of ordinary treatment." While allowing for much trickery and exaggeration "we cannot set aside all health miracles with the explanation that they were manipulated by the priests. It is more in accordance with the facts to relegate the cures to the same category as hypnotic or magnetic cures, the miracles of Notre Dame de Lourdes, or de la Salette, and the faith-cures of modern Christian Science" (p. 176). It is noteworthy that blindness, paralysis and insanity are the chief afflictions which are successfully treated in these so-called miraculous ways. "The cures are of a psychological, rather than physiological character, and whatever is effected must be through the influence of mind on matter."

The latter part of the book deals with the practice of incubation in modern times, some of the descriptions having especial value from being derived from first-hand evidence.

Miss Hamilton says: "Illness was the most frequent motive for consultation; hence the primary aspect of incubation is medical. But the gods were not consulted solely on account of disease. In any case of difficulty or distress incubation might be tried." She appears to have

overlooked the fact that dreaming to obtain oracles is still practised in Italy and elsewhere in a manner that has not received the sanction of the Church. C. G. Leland in his *Etruscan Roman Remains in Popular Tradition* says (p. 252): "The belief that prophetic dreams can be secured by sleeping in a pig-pen is widely spread. The Roumanians and so-called Saxons, and probably all the Slavonian and gipsy inhabitants of Hungary are familiar with it. Therefore I was not astonished when, on asking my fortune-teller from the Tuscan Romagna whether people ever slept in a pig-pen, she at once replied that to have a true dream it was the most approved method known, and proceeded to explain how it should be done." The practice is described and the prayer to be said is given; here appeal is made to Saint Antonio, "who art placed over the pigs," Mr. Leland adds. "In Germany," says De Gubernatis, "common people often go to sleep on Christmas Day in the pig-sty, hoping to dream there; and this dream is the presage of good luck." It appears also that pigs were kept in the cellars of the Temple of Ceres and Proserpine. Ceres was frequently consulted by means of dreams, and this dreaming occurred specially in her temples in which pigs were kept. To get prophetic dreams by sleeping in a pig-sty was also a Scandinavian custom. Miss Hamilton is to be congratulated on having reaped a rich harvest from a practically untouched field.

A. C. H.

The Family. By HELEN BOSANQUET. London: Macmillan & Co., 1906. Pp. vii, 344.

It is a commonplace now to say that the economic labour unit is for many purposes the family, but there existed no recognised treatise taking the family as its central idea until Mrs. Bosanquet's book appeared, unless we except the same author's illuminating *Strength of the People*. Those who are acquainted with the latter work will be predisposed to welcome this later essay, and their hopes will not be disappointed. It is not wholly or even mainly economic, though economic matters bulk largely, especially in the second part. The first part is concerned with origin and development. Existing material is adequately reviewed, and the author's balancing of conflicting judgments is well done, though there are indications that the question of the universality of the patriarchal form was not approached with an open mind. "Throughout all changes one husband and one wife has been the constant type, all other forms mere aberrations, and the process of development has been always towards a more deliberately conscious, and therefore higher form of monogamy" (p. 39), seems to sum up Mrs. Bosanquet's view. The theory of the priority of Matriarchalism is definitely rejected. "There seems to be, then, no sufficient ground for the theory that the patriarchal was preceded by a matriarchal Family. So far as we can see, what really preceded it was a less highly organised form of the patriarchal Family, sometimes, but not always, co-existing with a system of relationship through the mothers" (p. 35). The work was written before the results of Dr. Rivers' investigation had been published, and it is impossible to say, therefore, whether, in view of the fresh evidence brought forward by him, Mrs. Bosanquet would still take quite so decided a line upon the question of group marriages. The centre of interest of the book is in part ii. Part i. is based on the work of others and rounds off the treatise. The whole volume is the better for the inclusion of part i., but again and again we find indications that its *ratio essendi* lies in part ii. which contains the

results of much fine observation and theorising. Thus as early as at the end of chapter ii. the practical note of present-day needs is struck: "And if it should ever come to pass that men and women will be content to abandon their children to the community merely for the sake of their own greater ease, it will mean such a breaking up of the whole moral nature of the race that not the family alone, but the State itself will be shattered in its foundations" (p. 40). Part ii. is a brilliant analysis of the Modern Family in respect of its economic functions, psychology and constituents. The philosophy of the *Strength of the People* is continued and elaborated. Some critics will think, not without justification, that Mrs. Bosanquet tends to make the family *the* important social unit, instead of *an* important social unit. Finding the bow bent too much in one way she overstrains it in the opposite direction. Hence the practical conclusions reached have occasionally the appearance of reactionism. Mrs. Bosanquet's attitude to women's industrial work appears to us a little narrow, and also her large concession of authority to the father. Not that the mother's work is represented wholly as executive under direction and therefore as invariably less responsible. She is depicted truly as ruling normally within a defined sphere of influence with unquestioned authority. This is brought out most graphically in the passage quoted from *The Queen's Poor* on pages 274-275. Again, passing to another matter, we should be inclined to fear lest continuity of work by families should be evidence of social inertia; yet Mrs. Bosanquet gives no sign of feeling this when she registers the fact of its existence. The discussion of the effects of the French *dot* system seems to us excellent, and the quotation from M. Demolins on pages 236-237 as most apt and instructive. We readily follow Mrs. Bosanquet here, and agree fully with her conclusions as to its undesirable effect in restricting the growth of population. Again, the psychological analysis of family feuds is perfect as well as the allied description of the family circle as a training ground for character.

We have noticed only some few of the many points with which we have been impressed. We must end on the note, hardly of praise, which would be presumptuous, but of admiration, with a strong recommendation to all students of economic and social matters to read the book for themselves.

S. J. Chapman.

Some Problems of Existence. By Norman Pearson. London: Edward Arnold, 1907. Pp. 168. Price 7s. 6d. net.

This is a collection of essays, one of which appeared in *The Monthly Review*, others in *The Nineteenth Century*, on such problems as "Before Birth," Immortality (human and animal), Right and Wrong, Sin, Evil, Free Will, Prayer, etc., having as their object to outline a theory "which philosophy and religion may be able to accept, and science need not reject, and which provides for these problems some not unreasonable solution". This is a good deal to accomplish in 168 pages, but the process is greatly simplified by the liberal "postulates" demanded, *viz.*: (1) the existence of a Deity; (2) the immortality of man; (3) a Divine scheme of Evolution proceeding under the sway of an inflexible order. As a matter of fact you need only read the last twenty-five pages to find out all the author has to say; so that we have here one of the most compendious solutions of the problems of existence ever offered. In order to introduce the author to philosophical readers, I may mention that he is an adherent of Clifford's *Mind-Stuff* theory, and believes that

"human minds . . . are in the nature of matter, so far, at any rate, as to possess extension" (p. 51). Scientists may, likewise, be interested to learn that he considers that some form of colloid matter may be the connecting link between organic and inorganic existence, and that the structures of the vegetable world show a utilisation of "crystalline potentialities brought over from inorganic matter". But he does not weary you with any proofs of these things; his one elaborate demonstration is that of Determinism, which has the merit of considerable antiquity. There is no personal or even individual immortality for the lower animals, but their "Mind-structure" may be wrought into and become part of a human soul. How, he does not say, but from what immediately precedes, one might conclude he was arguing against Vegetarianism. Anyhow the human "Mind-structure" has a more entrancing future. Death is a unique experience which it survives, to find itself fairly on the road to complete harmony with its environment, and even with a likelihood of being elected a species of departmental deity (cap. xii.). Prayer, he thinks, may have a kind of efficacy "not by a violation of natural order, but through telepathic agencies which are part of that order" (p. 121). God is personal and *not* infinite. He is a self-limitation of the Absolute of Philosophy.

A romantic flight of the imagination is admissible from the sure foundation of science and the laborious structure of a closely reasoned philosophy; it is just a little too trying to have the romantic imagination, naked of all but a few tags of outworn philosophy and scraps of doubtful science, posing as a satisfactory *Welt-Anschauung*. When this is the case we have no longer to do with hypotheses but conceits, light frothy work, which may make one doubt whether such escapes of energy, however trivial, accord with the perfectly operating factory which Mr. Pearson figures as receiving "mind-stuff" at one end and issuing prize-products at the other. With some of Mr. Pearson's ideas I have actual sympathy, but think it is a pity he ever spread them out in this wash of essays, and doubly a pity that he has republished these.

D. M.

Thought and Things. A Study of the Development and Meaning of Thought or Genetic Logic. By James Mark Baldwin. Vol. i. Functional Logic, or Genetic Theory of Knowledge. London: Swan Sonnenschein; New York: Macmillan & Co., 1906. Pp. xiv, 273.

This is the first of three volumes to be published in French in the *Bibliothèque de Psychologie expérimentale*. The second which is promised (but has not yet appeared) is to deal with the "Genetic Theory of Thought," "The Reasoning of the Formal Logic," and "The Theory of Truth and Falsity". The third is to treat of the "Hyperlogical" functions and to "give to the functions of play and art an essential *rôle* in the development of knowledge". Meanwhile "this first volume traces the achievements and embarrassments which motive the great dualisms of Substance and Reflexion". Critical Notice will follow.

Schopenhauer und Nietzsche, Ein Vortragszyklus. Von Georg Simmel. Leipzig: Duncker & Humblot, 1907. Pp. xii, 263. Price, M.4.20.

It is always a pleasure to consider a book by Prof. Simmel, even when one disagrees a little with his conclusions. In the present instance, I am fortunate in finding myself so much at one with our author, that I am only anxious to express my appreciation of his remarkably sympa-

thetic and able treatment of two thinkers whose philosophy, with all its faults, was the very substance of their lives. Along with the unavoidable recapitulation of much that has been worn quite threadbare, there are fresh and acute criticisms, delicate psychological observations and carefully weighed deliverances which we are glad to have, but above all an attempt, perhaps not too successful or rigidly maintained, but at least an attempt, to take up what is the correct attitude towards these men. There is no question of a fresh interpretation. Some misconceptions regarding Nietzsche have, indeed, to be cleared away, but what Prof. Simmel does is, disregarding the eccentric, paradoxical or even repulsive features of these philosophers' systems, to treat them as the expression of definite types of the human soul, and to attempt ideally to reconstruct their living thought in relation to the field of culture. This is no doubt right. The logical examination of Schopenhauer is now quite superfluous, and of Nietzsche it is now, and ever will be, perfectly useless. And yet that does not mean that they are unworthy of attention. A thinker may be convicted of logical error, and yet his system represent truthfully the relation of his soul to the world, and, to say nothing of incidental profundity of insight, have as a whole so much in common with our experience, that it is possible, and even where we disagree, desirable to reconstruct its "truth". Some of us in this matter may have more reproductive power than others. Such can recall moments of trial, failure, discouragement, furious anger, times of opposition to brute, crude fact, when the "truth" of these men seemed very like *the* truth indeed, but all have the power in some measure. After all, as Prof. Simmel truly remarks, pessimism and optimism exist, not as a consequence of any elaborate balancing of pleasures and pains, but simply because of the fact that there are pleasure and pain in the world and souls with an immense potentiality for either, but more responsive to one than the other. For Schopenhauer the fact of pain sufficed. His very soul writhed at the contemplation of mere Being impenetrable to reason and productive of pain. His theory of the Will was an effort to render the mystery in some degree more tolerable, and all the rest sprang from his passion for systematic unity. Unity, Will, Suffering! Within this dreary round his thinking was for ever confined; although sometimes, as in his theory of art, he seemed dimly perceiving the means of escape. Systematic consequence, however, made him deaf to contradiction; everything must be reduced to one purpose, the removal of pain. Upon his failure to admit any absolute values in morals, or even in art, Prof. Simmel has some very interesting remarks (pp. 173 ff.). I may note also that the conventional opposition between Will and Duty seems to him to point to some fundamental process which we do not comprehend in its unity, but can only describe by means of a circle: *Dass das Wollen sich nach dem Sollen richtet, das Sollen aber von vornherein schon ein Wollen sein muss.* Prof. Simmel, who recognises the real depth of Schopenhauer's moral teaching, considers that, as against the conventional interpretation of repentance, he was right. The reproach of conscience immediately concerns what we have done, but fundamentally what we are. His assumption, however, that our real being was unchangeable was less justified. Here, as in Schopenhauer's decision for unity without individuality in the Absolute, we seem to have the results rather of temperament than reflexion. Before leaving Schopenhauer, I should like to draw attention to Prof. Simmel's important discussion of Cruelty on page 98 ff. I think this might not have been written but for the suggestive use of Cruelty by Nietzsche. Simmel points out that precisely that pleasure in the pain of another which seems the

most emphatic expression of the severance between man and man, is just where the division between them almost breaks down; since with the pleasure in the pain of another is deeply bound up pleasure in one's own pain—a paradox of feeling which has not been made psychologically intelligible. We know that suffering often leads to a sense of expansion of the self, to arrogant expressions of pre-eminence, and this may form the bridge to Cruelty. Cruelty is indeed characteristic of natures thirsting after power, since this appears most certainly theirs when they can inflict upon the body and souls of others that which the will of their possessors resists. It appears to Simmel a mistake to regard cruelty to oneself as a secondary derivative form of an original tendency to be cruel to others. Both are expressions of the extension of the feeling of self, and pleasure in one's own pain is perhaps the more fundamental. In any system of pessimism there is sublime cruelty to oneself, and to others in the havoc with which it visits recognised values and the way in which it drags hidden suffering to the light of day. Schopenhauer with the greater powers championed the worse cause, and Prof. Simmel considers that to Nietzsche, who had no metaphysical, merely an ethical impulse, belongs, with all his faults, the sympathy of the modern man. Schopenhauer starts from and ends with a world set upon, yet deprived of purpose; Nietzsche found in the concept of evolution the possibility of an end: Life itself became the object of Life.

Prof. Simmel quite rightly protests against regarding Nietzsche as a modern representative of the Sophists, or a new edition of Max Stirner. His concentration of value in the individual receives objective significance as a stage in the development of humanity. He made Personalism into an objective ideal, and thereby separated it completely from Egoism properly so-called: *Der Egoismus will etwas haben, der Personalismus will etwas sein.* To imagine him a hedonist is a miserable misconception: *Will man Glück, so muss man zu den Armen des Geistes sich gesellen* was his sincere conviction. Prof. Simmel draws an interesting comparison between Maeterlinck and Nietzsche (p. 220). Maeterlinck draws as it were the democratic method of valuation into the individual soul; whereas, just as for him the worth of mankind lies in individual outstanding personalities, so Nietzsche finds the value of the individual life in supreme hours of realisation. It is easy to show how, as a matter of fact, we value things sometimes according to extremes, sometimes according to averages, or at another time mix up both standards. It is in art that Nietzsche's method of appraisal finds its clearest recognition. Nietzsche had no sympathy with the modern tendency to posit super-individual values in society, and here he gets some countenance from Prof. Simmel (p. 206 ff.), who thinks that "Society" is a conception singularly lacking in clearness and definiteness, and that moreover it is only one of the forms in which live mankind, its interests, forces, contents, so that it is wrong to identify mankind purely with the form of social existence. That society could not as a whole be in the individual, but that humanity could, was the contention of Nietzsche: *Stellt er die aufsteigende Linie dar, so tut das Gesamtleben mit ihm einen Schritt weiter.* The desire to rise above ourselves must be recognised, as well as the measure of truth in Nietzsche's contention that the positive in us has to be heightened; we are not something too much, but rather something too little. Moreover there is much in his other contention that life must pay for its height by its breadth. The sense of responsibility, integral with Nietzsche's ideal, is bound up with his strange doctrine of the "ewige Wiederkunft des Gleichen" upon which Prof. Simmel has some sensible and fairly fresh comments (p. 246 ff.).

Nietzsche could never have valued this doctrine if he had been as much as capable of logical consistency, but what he meant to effect by it is clear enough. On this subject Prof. Simmel quotes the following from his literary remains: *Dass alles wiederkehrt ist die extremste Annäherung einer Welt des Werdens an die des Seins: Gipfel der Betrachtung.*

In conclusion, just one reminder to Prof. Simmel that his compressed and energetic style can be occasionally obscure. Even one to whom the language used is native found the sentence (p. 206) ending with the following words, and particularly them, rather a mysterious deliverance: vielleicht weil derjenige Stand zu einem Träger erheblicher realer Macht und einem Gegenstand ethischen Interesses geworden ist, mit dem die Angehörigen der höheren Schichten nur durch die Tatsache, dass sie mit ihm zu einer "Gesellschaft" gehören, verbunden zu sein pflegen. An Klarheit lässt dieser Begriff etwa so viel zu wünschen ubrig, wie der Begriff der "Natur". . . . I can only suggest that all this *lässt an Klarheit etwas zu viel zu wünschen übrig*. I should be relieved to know what it all exactly means.

DAVID MORRISON.

Il Sentimento Imperialista, Studio Psico-Sociologico. By G. AMADORI-VIRGILI. Milano: Remo Sandron, 1906. Price Li. 3.50.

Dr. Amadori-Virgili is already known to readers of MIND by the excellent little volume which he published three years ago on the Family in Primitive Society. The present volume is likely to increase the writer's reputation, and if it had been published a few years earlier it would have excited a greater amount of interest than is likely to be the case at the present time. Imperialism at the present moment seems to be out of fashion in every civilised community, and a discussion of the nature and characteristics of the imperialist sentiment, although intrinsically of the highest social and political as well as psychological importance, inevitably suffers from the eclipse, perhaps temporary eclipse, from which imperialism itself is now suffering. Sgr. Virgili opens his volume with an Introduction in which he discusses the character and value of what he calls the "psycho-sociological" method of studying the nature and processes of the collective mind. This is preceded by a chapter on the characteristics of the collective mind itself. These two introductory chapters constitute the theoretical basis on which the structure of the book is reared. The volume is divided into three parts; the first part is concerned with the nature of imperialism, the second with the causes of imperialism, and the third part with the influence of the imperialist idea. In the part which deals with the nature of imperialism, Sgr. Virgili first of all defines the imperialist idea, and points out the ends it has in view together with the means by which it seeks to attain those ends. He then proceeds to describe the place occupied by altruism, the sense of duty, religion and faith in the imperialist temper of mind. The concluding chapter of part i. consists of a consideration of the social value of imperialism.

After appreciating the nature of the imperialist sentiment Sgr. Virgili proceeds in the second section of his volume to consider the conditions which give rise to it. These conditions he considers to be the general intellectual attitude of the modern mind, and the politico-economic circumstances of the modern state. These two causes have been the chief ingredients in the creation of imperialism as a sentiment,—a sentiment which has ultimately developed into a political theory productive of considerable commotion in the modern world. The last part is a careful examination of the influence of imperialism. Although

Sgr. Virgili's book is concerned with a political phenomenon, this phenomenon is examined not from a political but from a purely scientific point of view. The book in fact is a purely scientific study in social psychology in so far as it is possible to apply scientific methods to such a subject. It is the application of the theories of social psychology to the facts of modern social life. Certain mental conditions and processes arise out of certain sets of social circumstances, and Sgr. Virgili's object is to exhibit these conditions and processes at work in the political phenomenon of imperialism. If we admit that there is such a thing as social psychology at all,—an admission for instance which a thinker like Prof. Sigwart would not make, we must be prepared to say that Sgr. Virgili has applied and illustrated its principles in a very interesting and illuminating manner in his latest book. He has a wide range of knowledge; he is well acquainted with modern political and economic conditions; he possesses considerable powers of generalisation, and is able to present his case with much dialectical skill.

W. D. Morrison.

Religion und Wissenschaft: Eine Studie über deren Verhältnis. Von Alex. von Mocsonyi. Wien und Leipzig: Wilhelm Braumüller, 1906. Pp. 59.

This pamphlet is conservative, not to say reactionary, in tone. Religion and Science express two fundamental but entirely different tendencies of human life. Science aims at objective knowledge; religion consists "*in einer subjektiv-mystischen Gemütsbeziehung zum mystischen Urgrund der Welt*". The certainty of the existence of God as omnipresent intelligence (which the author demonstrates) is the sole point of contact between science and religion, each of which pursues thenceforward its own way: *Das Begreifliche das Gebiet der Wissenschaft, das Unbegreifliche dagegen das Gebiet der Religion.* Each Church should hold firm the faith of which it is the depository, and not make it a prey to the empty speculations of the philosophy of religion; for it is only in the form of historical religions that religion is a factor in culture; the so-called religion of reason, whatever form it assumes, is a mere caricature of the real thing. This study first made its appearance a year ago in the Roumanian language. The author thinks his view has originality enough to merit being drawn to the notice of a wider public. That may be doubted. His attitude of mind is a common enough one; his exposition of it reminiscent of Spencer: *Der ungelöste Rest des Problems ist der unermessliche Feld des Unbegreiflichen, und auf diesem Felde hat die Wissenschaft nicht mitzusprechen, denn dieses bildet die ausschliessliche Domäne des Glaubens.* He may be said to represent the psychological Apologetic, a thing neither very new nor entirely convincing. As to the right of each Church to its separate existence, that is not in need of such justification as the author offers.

D. M.

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VIII.—PHILOSOPHICAL PERIODICALS.

Philosophical Review. Vol. xv., No. 6. **A. K. Rogers.** 'Professor James's Theory of Knowledge.' [We may grant that truth must have some practical consequences to be worth discussing, and that our growing experience is guided in a teleological way. But (1) the essential point of pragmatism as a system is that the qualifications of reality are actually made, in every sense of the term, and first become actual, in the growing process of human experience: the qualifications which we call true differing from those we call false solely by their practical satisfactoriness. James, however, seems to grant the reality of the object beyond knowledge; but he affirms that about the nature of the object, supposing it exists, and whether it resembles our idea or not, humanism has no need to inquire. This is an untenable compromise. (2) Again, there is an inner aspect of knowledge which refuses to be exhausted in terms of action; the conscious reference present in the ideal anticipatory function. James explains this as the feeling of conscious transition. But no rendering of the facts can rule out a real ability to look forward to the future, to refer to something which is recognised as not yet a matter of direct experience; and the existence of such an anticipatory image is all that needs to be postulated for transcendence. The ambiguity of James's use of experience comes out clearly in his discussion of our perception of the separateness of selves.] **W. B. Pitkin.** 'Continuity and Number.' [Mathematicians declare that the whole-number series is discontinuous, and that interpolations (fractions and irrationals) must be made between integers to render it truly continuous. But the base of any number-system must be the sole true element in all groups symbolised by the other members of the system: it is therefore improper to construct a number-continuum by interpolation between integers, while on the other hand the integral system forms as true a continuum as is possible in the realm of number. Arithmetical continuity is simply an instance of logical consistency of reference: it is therefore unlike spatial and temporal continuities, and the speculations which make use of it (higher mathematics and idealistic metaphysics) must accordingly be revised.] **J. E. Russell.** 'Solipsism: the Logical Issue of Radical Empiricism.' [Radical empiricism contains no principles by means of which it is logically admissible to reach other reality than the individual's own experience. This is shown first by an analysis of the use of 'experience' (thought, transcendence, cognition), and secondly by an examination of the explanation offered of perceptual experience and of the knowledge of other minds.] **E. H. Hollands.** 'The Relation of Science to Concrete Experience.' [Münsterberg's voluntarism asserts that the objects of science are unreal, secondary, abstract; but that its judgments and concepts are parts of immediate reality. This view fails to see that, as experience develops, there is not a mere addition of volitions to immediate volitions, but a modification of new and old, a constant process of mediation and organisation. Pragmatism (James, Dewey) breaks

down, in the same way, at the transition from the supposed immediate experience to the secondary and dependent processes of thought ; it tends to throw epistemology aside, and takes refuge in an uncritical realism. The sensationalism of Mach and Pearson is thoroughly uncritical. There remains idealism ; and it seems, in fact, that Hegel has set forth the most profitable way of approaching the problem.] Discussion. **J. E. Russell.** 'Objective Idealism and Revised Empiricism.' [Critique of Dewey's paper in the last number. Objective idealism is defensible ; Dewey's empiricism leads either to the older empirical explanation of knowledge or to a Kantian epistemology ; its outcome is that the world of human experience is the only universe we can legitimately acknowledge.] Reviews of Books. Notices of New Books. Summaries of Articles. Notes. Index.

Psychological Review. Vol. xiii., No. 6. **W. B. Pitkin.** 'Reasons for the Slight Æsthetic Value of the "Lower" Senses.' [Discusses, and finds inadequate, certain previous explanations : that in the lower senses we feel objects in direct contact, so that disinterestedness is impossible ; that all contacts not due to voluntary movement involve a pain-tone ; that ordinarily the senses are not stimulated separately, so that the resultant feeling-tone is irregular (Volkelt) ; that we cannot give spatial form to the lower sense-qualities (Santayana) ; that these qualities do not act directly, but only by way of visual and auditory revival (Ribot) ; that no pleasure is judged to be æsthetic which does not appear permanently pleasant in revival (Marshall). Two large groups of observations (the Galton tests and studies in after-imagery) clearly indicate the vital connexion between æsthetic effectiveness and ease and vividness of persistence : the lower senses are extra-æsthetic (not unæsthetic) because and in so far as their after-images are short, their process of adaptation rapid, and their background of imagery elements meagre. This view may be considered a modification of Marshall's.] **J. R. Angell.** 'Studies from the Psychological Laboratory of the University of Chicago.' **A. Wyczolkowska.** 'A Study of Certain Phenomena Concerning the Limit of Beats.' [(1) Fork and pipe tones from 8 to 36,000 vs. are arranged in 8 groups according to the nature of the accompanying noises. All tones show rhythmical fluctuations. (2) Beats are of three types : beats of the primary tones, which may be countable or may show themselves as an intermittence too rapid for counting ; beats (roughness) originating mostly in difference tones ; and beats recognised as a characteristic ringing. Failure to discriminate hese types accounts for the divergent statements as to the limits of beats found in the literature.] **J. M. Baldwin.** 'Introduction to Experimental Logic.' [Experimental logic, pursuing functional and genetic methods, investigates thinking with a view to tracing the derivation, development, and embodiments of belief : that is, the why, how, and what of the logical mode. The method by which thinking does its work has four stages : the make-believe use of an object possessing merely inner character as having further meaning or reference—the object thus becoming a schema ; the erection of such schemata experimentally under the urgency of a desired or intended fulfilment ; generalisation,—the individuation of objects as general, particular, singular and universal ; and reflexion. There are two types of schematism, corresponding to the distinction of recognitive and selective meaning : the scientific or theoretical, and the selective or appreciative. So far, however, as they are subject-matter of reflexion, all appreciations are made truths, all selective are made theoretical meanings. On the other hand, reflective

process is itself motived by its own interest. Hence in the long run all meanings of appreciation may be interpreted as theoretical truths, and all theoretical knowledges as meanings of fulfilment and appreciation.] Discussion. **S. S. Colvin.** 'Certain Characteristics of Experience.' [Experience is the ultimate essence of the universe; has a complete identity with finite consciousness; is always subject and never object (we know objects experienced, not experiences as such); is always realistic, though itself not real; and comes always with a tinge of personality, though itself not identical with personality.] **P. Hughes.** 'Categories of the Self.' [If we call the ego the individual who is self-conscious, and the self that conscious contents by which an individual recognises himself, we may distinguish six distinct selves. These are the historical self, the will-self, the pretension self, the realisation self (the four with which 'self-appreciation' is most commonly connected), the bodily self and the experience self.] Editor's Note.

American Journal of Psychology. Vol. xvii., No. 4. **A. L. Gesell.** 'Jealousy.' [Animal jealousy is closely related to anger and fear, and is a fundamental organic instinct; it is connected chiefly with feeding, mating and breeding, and serves as a corrective to the purely social instincts. In man, jealousy appears in infancy, and continues throughout life, changing however in character and expression; in the adult, it is a peculiarly complex and variable state of mind, possibly the most painful of all emotions, and its usual constituents are anger, grief and self-pity. The pathology and criminology of jealousy reveal its high practical importance; the best pedagogy for children and youth is probably indirect and preventive; anthropology shows the significance of sexual jealousy for the family institution; sociological study proves that jealousy colours social customs and attitudes, and motivates group-action.] **E. A. Hayden.** 'Memory for Lifted Weights.' [Seeks to determine the influence of time-interval upon accuracy and speed of recognition, and to ascertain the mental processes involved in comparison and recognition. The larger part of the judgments passed were absolute. A correlation was found between correctness of judgment, length of time required for judging, and relative mean variation. The interval of forty to sixty seconds proved to be the most favourable. Judgments of 'like' were negative, *i.e.*, were passed when positive criteria were absent; 'right' judgments were less variable than 'wrong'; and 'absolute' judgments were shorter and less variable than the others. The images involved in judgment were rather visual than kinæsthetic: there was no evidence of a memorial image undergoing a progressive decay that bore a definite mathematical relation to the time as measured by the amount of work necessary to restore it to its former integrity. The author adopts, in essentials, the theory of Müller and Schmann, save as regards the part played by the 'motor' image.] **J. F. Shepard.** 'Organic Changes and Feeling.' [A study of the organic reactions accompanying various mental processes, with special reference to Wundt's tridimensional theory of feeling. Experiments, with introspective record, were made upon changes of volume, peripheral and central, of respiration, and of rate of heart. (1) On the introspective side, strain and excitement, relaxation and depression, are analysed in terms of organic sensations (muscular tonus, strain, lax muscles, etc.). Agreeableness seems to measure success, disagreeableness failure, of a given mental stage to prepare adequately for the next. (2) Feelings cannot be classified on the basis of vasomotor and heart-rate changes; there is no reverse relation even between the accompaniments of agreeableness and disagreeableness,

much less are there three distinct pairs of reactions. All moderate nervous activity tends to constrict the peripheral vessels, and to increase the volume and size of pulse in the brain; it also increases the heart-rate. Strong stimuli have both an inhibiting and an exciting effect, seen especially in heart-rate; they also cause a double reaction in the brain. The most marked effects are at changing periods, particularly with an incoming stimulus. Activity of any part, or prominence of sensations from it, tends to counteract constriction in that part.] Psychological Literature. Psychiatrical Literature. Index.

International Journal of Ethics. Vol. xvii., No. 2. January, 1907. **A. E. Davies.** 'The Good and the Bad.' [Morality is both institutional and instrumental, the former as moral judgments made concrete in the form of social conventions, the latter as moral feelings or motives as the means to satisfactions. Moral distinctions may accordingly be considered from the standpoint either of society or of the individual, either of judgment or of feeling.] **Helen Wodehouse.** 'The Idealist and the Intuitionist.' [Maintaining that it would be an advantage to ethics in its present stage to have a sharp contrast between the doctrines of intuitionism and idealism, the writer considers the fundamental differences in their conceptions of the definitions of important ethical terms. A second article will use these definitions to bring out the distinctions between the doctrines themselves.] **B. de Selincourt.** 'The Ethics of Passion.' [An exposure of error contained in the ideas involved in the revolt against the institution of marriage. While justified as against what is false and immoral connected with the conventional view, its opponents fail to grasp the true meaning underlying it.] **J. W. Garner.** 'Political Science and Ethics.' [A brief review of opinions as to the connexion between them. They are distinct but closely related.] **J. Oliphant.** 'Parental Rights and Public Education.' [The nature of the religious instruction in schools should more and more be left to the discretion of the teachers. "The natural process of evolution would seem to be that in the present state of public opinion all schools should begin by offering special facilities for denominational teaching to meet the wishes of every religious group among the parents concerned, and that these should be continued as long as the demand remains effective, the freedom of the ordinary teachers in regard to religious questions being made as complete as possible. In the degree that the separatist spirit on the part of the parents declined, and that the unsuitableness of all dogmatic teaching for the young was recognised, the demand for special facilities would fall off, and the responsibility for the moral and spiritual welfare of the children, as far as it can be sought in the school, would devolve more and more upon the regular teachers."] **B. K. Gray.** 'The Ethical Problem in an Industrial Community.' [With the transition from simple to complex social relations, the individuals concerned cease to be persons known to each other and become anonymous units at once mutually unknown and closely interdependent. The problem, accordingly, is to cultivate and render available a *predisposition* to act rightly towards individuals. The means to this are social knowledge and social imagination—the one discovering the progressive interdependence, the other the symbolic or representative character of individuals.] **E. M. Weyer.** 'A New Search for the Soul.' [Personality lies in appreciations rather than perceptions, feelings rather than ideas. These are immortal, and personality can thus persist without memory.] Book Reviews.

JOURNAL OF PHILOSOPHY, PSYCHOLOGY AND SCIENTIFIC METHODS. III. 18. **F. C. S. Schiller.** 'Idealism and the Dissociation of Personality.' [Suggests that the problem of the relation of individual minds to a 'universal' mind may be elucidated by the empirical analogies of abnormal psychology, and that the former may be conceived as 'dissociated' states of the latter, and discusses whether a dissociated Absolute can be reunited and whether it is to be called 'mad'.] **A. E. Davies.** 'The Genesis of Ideals.' ['The ideal is at once the product of experience and the organising centre of all knowledge and conduct,' and 'a transcendental element of experience which is not without a transcendent character.'] III. 19. **W. B. Pitkin.** 'The Relation between the Act and the Object of Belief.' [Apropos of Dewey's paper on "Beliefs and Realities" in *Philosophical Review*, XV., 2. There are three questions: (1) Is the thing believed in real as believed to be? (2) Is the believing attitude as such real? (3) Is there any real relation between the thing and the attitude? To (1) the answer seems to be 'only sometimes'. Hence the need to search the belief-attitude for an essential relation to the belief-object. We have in the belief-act a certain *a priori* characteristic without which objects of belief would cease to be believed and the attitude itself would be suspended. This may be called its 'self-transcendency,' meaning thereby that "the object of belief is determined by other factors than those which determine the act of believing in it". This feature, which is possessed even by hallucinations, must not, however, be taken as implying a lack of relation to experience, for "a belief may simultaneously be in a transcendent and yet be subjective," and the distinction between true and false is one between kinds of reals. A thoughtful paper, amounting to a proposal to fix the meaning of 'transcendent' in a new sense.] **E. A. Norris.** 'Self as a Developed Feeling Complex.' [Only a dynamic and disembodied self is revealed in ultimate analysis, but for practical purposes it may be related to the 'body' as function to organ.] **A. W. Moore.** 'The Function of Thought.' [Criticises Santayana in III. 15 and concludes that the passages in the *Life of Reason* giving thought a constructive and constitutive character are too numerous, convincing and vital to be taken "in a merely Pickwickian sense".] III. 20. **J. E. Boodin.** 'Space and Reality: I. Ideal or Serial Space.' [A vigorous 'radically empirical' study which concludes that modern critical geometry has destroyed mathematical dogmatism, and with it "the old bulwark of *apriorism*," while "the physical scientist selects among these mathematical models such as will enable him best to manipulate or anticipate his facts".] **W. J. Newlin.** 'A New Logical Diagram.' **B. C. Ewer.** 'Metaphysics, Science or Art.' [*Cf.* III. 14.] Contains also a long review of H. H. Joachim's *Nature of Truth* by F. C. S. Schiller. III. 21. **S. I. Franz.** 'Psychological Opportunity in Psychiatry.' [Argues that "the study of the mentally abnormal will be of as great value to normal psychology as the study of the effects of extirpation and hyperactivity of various parts of the body has been to physiology".] **F. Arnold.** 'The Given Situation in Attention.' ["Attention is nothing more than the entire subjective aspect in the given situation under development."] **A. H. Pierce.** 'Emotional Expression and the Doctrine of Mutations.' [The explanation of emotional expression as a survival of once useful reactions is often far from convincing and the principle of mutation might supplement it.] **W. C. Gore.** 'The Mad Absolute of a Pluralist.' [Replies to Schiller's suggestion in III. 18 that if the Many be conceived as the 'dissociated' personalities of the One, the latter is mad, and argues that if so the the Absolute is mad only in so far as pluralistic, and may still be conceived as the principle of sanity and wholeness.] III. 22. **J. E.**

Boodin. 'Space and Reality: II. Real Space.' [A paper interspersed with many interesting remarks, to show that there must be real empty space, if distance is to be real.] **J. E. Russell.** 'The Pragmatist's Meaning of Truth.' [Admitting that a true idea always has practical value, yet it is true "for no other reason" than that it conceives the environment as it is. Illustration from a traveller lost in a wood.] **G. L. Jackson.** 'The Telephone and Attention Waves.' [Experiments to show that they exist in the case of sounds.] **K. Gordon.** 'Metaphysics, Science or Art.' [Reply to B. C. Ewer's discussion in III. 20 of the paper in III. 14.] III. 23. **R. B. Perry.** "The Knowledge of Past Events.' [Based on the assumptions (1) "that knowledge *contains* the things known," and (2) that "time is an order intelligible *in abstracto*," and tries to apply Bertrand Russell's definition of time as an 'asymmetrical transitive order' to the knowledge of the past.] **A. H. Pierce.** "Should We Still Retain the Expression "Unconscious Cerebration" to Designate Certain Processes Connected with Mental Life?' [Yes, taken as "the silent adjusting of the cerebral machinery for the subsequent turning out of a conscious product".] III. 24. **W. B. Pitkin.** 'A Problem of Evidence in Radical Empiricism.' [Argues that the objection to realism commonly brought by sensationalism, idealism and radical empiricism, *viz.*, that the 'independent' reality must be *known* and so ceases to be independent, contains a logical flaw. For this relation may be irrelevant and need not prove that the real can exist *only* in this relation. But Mr. Pitkin says nothing about the possible other relations; he has evidently assumed the independent existence of the real.] **J. H. Farley,** 'Unity and the World Ground,' and **W. James,** 'The Mad Absolute,' both continue the discussion of Schiller's paper in III. 18 started by W. C. Gore in III. 21. [James holds that the problem of the dissociation of the Absolute is one which monism must seriously face, and that the difficulty is not removed by declaring "that the Absolute is eternally three things—its pure identical self, the finite emanation or eruption and the reabsorption all in one"—the hypotheses should be thoroughly discussed. "Its advocates have usually treated it only as a logical necessity; and very bad logic, as it seems to me, have they invariably used."]

Revue Néo-Scolastique. Novembre, 1906. **P. Hadelin.** 'An intuitionalist theory of knowledge in the thirteenth century.' [An account of the metaphysics of Roger Bacon. Bacon rejects abstraction, and teaches the real identity of substance and activity in being.] **J. Halleux.** 'Concerning a book on the existence of God.' [The book is *Sources de la croyance à l'existence de Dieu*, by M. Sertillanges; among other difficulties this is insisted upon; how to prove to the monist that the world is contingent.] **F. van Cauwelaert.** 'Empirico-criticism.' [Deals with Avenarius, Mach, Cornelius and Ziehen, and the principle of economy of thought, "to exclude from our conception of an observed thing all that is not given with it".]

Revue de Philosophie. 1er Decembre, 1906. **Comte Domet de Vorges.** 'God Infinite.' [Discusses the finite God of J. S. Mill and Mr. Schiller. "The thesis of the finite God shakes Christianity to its foundation."] **A. D. Sertillanges.** 'Our Knowledge of God.' ["When I say the proposition *God is* does not place God in the category of being, M. Gardair concludes that in my eyes it places Him only in thought, and thence he takes occasion to confound me with Vacherot, for whom God is only a subjective postulate, owing to us His reality, instead of our coming out of His reality. But the real question is whether there be not something above being, as also above thought; and I say precisely that the proposition *God is* asserts the objective fact of something above

being, namely, the Super-Being, source of being."] **N. Vaschide** and **R. Meunier.** 'Memory of Dreams and Memory in Dreams.' **G. Cazals.** 'A New Conception of Personality.' [That of M. Bazaillas in his book, *La vie personelle.*] **P. X. Mertens.** 'Objective Value of the Idea of Substance.' 1er Janvier, 1907. **J. Grasset.** 'The Function of Language and the Localisation of Psychical Centres in the Brain.' [Maintaining against Pierre Marie the old-established localisation of aphasia.] **C. Boucaud.** 'Being and Love.' **A. Veronnet.** 'Matter, Ions, Electrons.' **H. Dehove.** 'External Perception.' [A defence of the scholastic position, that the sensible impression is the *medium quo*, not the *medium quod* of perception.] **J. Lebreton.** 'The Divine Infinity from Philo to Plotinus.' [A severe criticism of M. Guyot's two books on this subject.] 1er Fevrier, 1907. **J. Gardair.** 'The Transcendence of God.' [That though the being of God utterly transcends ours, still we do know Him as a positive reality, whereof creatures are imperfect copies.] **A. Sertillanges.** 'Reply to M. Gardair.' **Dr. Surbled.** 'Aphasia and Amnesia.' [That *aphasia* is due to *amnesia;* that memory governs words, and has its seat in the left tempero-parietal lobe of the brain.] **G. Chatterton Hill.** 'Sociological Conception of Divorce.' [Connexion of divorce with suicide.] **A. Veronnet.** 'Matter, Ions, Electrons.' [The resolution of matter into electricity.] **Mazo Nitobé.** 'Bushido, the Soul of Japan.'

Revue Philosophique de la France et de l'Etranger. 31e année. No. 10, Octobre, 1906. **G. Dumas.** 'Les conditions biologiques du remords.' [A physiological and psychological examination of some hypochondriacs in whom remorse had reached a peculiar and abnormal intensity, and a comparison with the so-called normal cases. The conclusion is that, while it has always logical conditions and implies the knowledge of good and evil, it depends also on organic and biological conditions: it presupposes a mental and physical depression, a tendency to doubt and to over-scrupulousness, and, in some cases, suffering and anguish. A really healthy and moral soul ought to be unmoved by remorse, or at least, by the help of reason and will, to get rid of it before long.] **F. Paulhan.** 'L'Echange économique et l'échange affectif: le sentiment dans la vie sociale.' [An analysis, penetrating deeply into the subject, of the nature of the affective social activity as in contrast with the economical one. Affection guarantees that the services will be complex and various, while economical exchange is specialised and restricted in its range. But the affective exchange, notwithstanding numerous differences, appears to be a species of the same genus as the economical one: its essential difference lies in this, that it is much less definite. Moreover, both are always, in fact, more or less mixed, and life in general, individual and social, seems condemned to pass from the affective to the economical state and to return from the latter to the former. It may be said, under some restrictions, that the progress of affective life towards economical exchange tends to the suppression of both egoism and altruism. Again, a return to the affective state is very often a necessary condition of advance or enlargement of the social organisation.] **W.-M. Kozlowski.** 'L' *a priori* dans la Science.' [The concrete laws of science and its fundamental principles, *e.g.* persistence of matter and energy, are not in things: they are added to nature by understanding. The scientist creates nature according to a scheme inherent in his mind: but this scheme is neither arbitrary nor individual. Certain *a priori* principles are necessary, as basis, even to empirical knowledge; and in science proper two kinds of *a priori* are to be distinguished: (1) the historical *a priori*, consciously and purposely

introduced and constituting the scientific principles and postulates; (2) the psychological *a priori*, an unconscious and involuntary product of our understanding, affording to science its fundamental concepts. The process of science consists in building up, in presence of the observed reality, an ideal and purely rational construction, in order to render experience intelligible. Science, being rational, is apodictic and perfect, but not in conformity with reality, for there is discrepancy between sensibility and reason. Hence scientific and cosmogonic antinomies: M. Kozlowski indicates them with the concepts and principles whereby they have been reconciled.] 'Revue Critique: *Sur la transmissibilité des caractères acquis*, par E. Rignano.' [A criticism by **F. Le Dantec** of this recent book.] '*La Psychologie des individus et des sociétés chez Taine*, par P. Lacombe.' [**M. F. Paulhan,** while agreeing with M. Lacombe in many of his criticisms of Taine's conceptions, maintains that some of them may still be of great use, provided they be emendated and enlarged.] Analyses et comptes rendus. Revue des Périodiques étrangers. No. 11, Novembre, 1906. **H. Bergson.** 'L'Idée de Néant.' [Shows that the representation of an "abolition of the real" is only the image of all realities as expelling each other, indefinitely. Further, the idea of inexistence is the idea of the suppression of a merely possible existence by a more substantial existence constituting the actual reality. And negation in itself differs from the affirmation properly so called in this, that the former is the judgment of a judgment: it affirms something about an affirmation, this latter alone affirming something of an object. Negation concerns somebody, to whom you intend to give warning, and not merely, as does the pure intellectual operation of affirmation, something. It has a pedagogical and social character. The author's conclusion is that the idea of Nothing, if interpreted as the idea of an abolition of all things, is a self-destructive idea and vanishes into a mere word. Accordingly, it is an illusion to conceive that nothing, as mere and absolute emptiness, is the *prius* of reality, and we should not trouble ourselves about the problems which have arisen from that "pseudo-idea" of Nothing.] **C. Bos.** 'Des éléments affectifs de la conception.' [Knowledge has two modes: an intellectual mode, and an affective mode. The concept formed according to the affective mode is qualitatively different from the concept formed through the pure intellectual process; and inasmuch as the properties of the latter concept may not coincide with those of the former, the principle of contradiction may be merely a particular case of what the author calls the sentiment of contrast. His general theory of the existence of an affective element in conception is applied to the psychological elucidation of the old question of the Universals, and to the suggestion that the ultimate elements of things may possibly be qualitative as well as quantitative.] **Eugenio Rignano.** 'Une nouvelle théorie mnémonique du développement.' [A short analysis of Richard Semon's theory.] **Probst-Biraben.** 'L'extase dans le mysticisme musulman: les étapes du soufi.' [There are the following successive steps in the Sufi's progress towards ecstasy: self-examination and analysis, elimination of obstacles and abstraction, expectation. As to the ecstasy itself, M. Probst-Biraben is inclined to think that it is an abnormal state of the principal consciousness which, having transformed into mere reflexes its most delicate psychical functions of control and action, has become an hyper-consciousness subjected to new mental laws and has devoted itself to a higher life giving it admittance into superior worlds.] 'Revue Générale.' **Eugène Blum.** [A review of recent books on pedology and pedagogy.] Analyses et comptes rendus. Revue des Périodiques étrangers.

Archives de Psychologie. Tome v., No. 4. **A. Mueller.** 'Le problème du grossissement apparent des astres à l'horizon considéré au point de vue méthodologique.' [Hypotheses are either unverified assumptions of spatial or temporal relations, made to account for facts observed; or affirmations of causal connexions between facts. In the former case, legitimation comes by proof that the facts are deducible from the assumptions; confirmation, by experimental demonstration of the reality of the consequences or factors implied in the legitimation; verification, by experimental proof of the reality of the assumptions. In the latter, legitimation involves proof, mathematical or experimental, that one group of facts derives exactly from another; confirmation demands that there be no unexplained residue; verification requires proof that the derivation assumed is the only one possible. The nine hypotheses already put forward to explain the apparent enlargement of the heavenly bodies near the horizon are grouped in accordance with the above scheme: all are rejected as inadequate. Claparède's (tenth) hypothesis is examined in detail, and is also rejected. The paper ends with a programme for further experimental work.] **G. Grijns.** 'L'agrandissement apparent de la lune à l'horizon.' [Owing to lack of practice, we underestimate the size of distant objects. Hence we always see the moon too small; but when it is on the horizon we are able, in some measure, mentally to correct this error of judgment, while no such correction is possible as the moon rises to the zenith.] **J. P. Nuel.** 'La psychologie comparée est-elle légitime? Réponse à M. Ed. Claparède.' [Critique of Claparède's article with the same title (*Archives*, v., 13) from the point of view of epiphenomenalism, introspection being regarded as the sole evidence of consciousness. There is no such thing as a comparative psychology.] **E. Claparède.** 'Expériences collectives sur le temoignage.' [Tests of the reliability of evidence, (1) by a questionary upon the disposition, furniture, dimensions, etc., of the vestibule of the Geneva University, and (2) by the interruption of a university class by the prearranged entrance of a masked figure. Above the detailed results, two general laws stand out. (1) If the witnesses know that they are to testify later, their coefficients of trustworthiness vary only between 80 and 90 per cent.; if they do not, the coefficients never transcend 60 per cent., and may fall to 30, 20, or even to a lower per cent. (2) Congruity of evidence from several witnesses does not necessarily imply its truth: for there may be agreement in error, due to general and impersonal tendencies, such as the tendency to reduce space in memory, to neglect the unusual and to testify to what is probable, etc.] Recueil des faits: documents et discussions. **T. Flournoy.** 'A propos des phénomènes de "matérialisation" du professeur Richet.' [Defence of Richet's procedure in publishing his Algerian experiences.] **H. Piéron.** 'A propos de la technique en psychologie.' **E. Claparède.** 'Réponse à M. Piéron.' [Deals with Claparède's review of the *Technique de psychologie expérimentale* of Toulouse, Vaschide and Piéron.] Bibliographie. Notes diverses.

Revue de Métaphysique et de Morale. 15e année. No. 1. Janvier, 1907. **Harald Höffding.** 'Le concept de la volonté.' [Will, though not the object of direct observation, to be posited as an independent manifestation of conscious life. The permanent direction of conscious life revealed by analysis. The relation, internal nature and existence of sensations, presentations, etc., determined by their relation to this central direction. The conception of Will expresses conscious life on its real, that of synthesis characterises it on its formal side. To admit only separate Will Types (Shand and others) overlooks the profound continuity of Will. There is an obscure need behind all values

and ends. The involuntary may exist without the voluntary, but not the contrary. As long as there is life there is never absolute equilibrium—there is always an involuntary preference.] **A. Lalande.** 'Sur une fausse exigence de la raison dans la méthode des sciences morales.' [Protests against the demand for ultimate proofs addressed to Ethics but never to sciences of fact. Morality cannot be deduced from anything other than morality, the existence of which must be granted if discussion is to have any value. There ought to be no demand that we should address ourselves to pure intellect reduced to its logical faculty and seek to impose upon it, by a combination of concepts, objective morality and moral obligation.] **A. N. Whitehead.** 'Introduction logique à la géometrie.' [A translation of the first chapter of Mr. Whitehead's forthcoming volume, *The Axioms of Projective Geometry.*] **G. Aillet.** 'La responsabilité objective.' Suite. [Shows by an examination of juridical progress regarding the responsibility for risks, that moral progress is an effort to increase our responsibilities in view of the consequences of our acts and the exigencies of situations, rather than any account taken of the anterior subjective state of the one culpable, and that the fresh collective responsibilities, which have the appearance of making less of human personality, assure its more complete development by permitting it to transfer its burdens to things.] Études Critiques: **L. Brunschvicg.** 'La philosophie pratique de Kant,' par Victor Delbos. Enseignement: La licence de philosophie. Questiones Pratiques: **F. Challaye.** 'La syndicalisme révolutionnaire.' Supplément: Livres nouveaux, Revues et Périodiques, Nécrologie, Souscription au monument Renouvier.

Archives de Psychologie. Tome vi., Nos. 1-2. **A. Binet.** 'Cerveau et pensée.' [Mind and brain, the mental life and the cerebral phenomena which accompany it, must be brought within the same universe: yet the two orders of existence appear to be incompatible. Spiritualism and materialism cut the difficulty: parallelism has difficulties of its own. The author proposes the following solution. Regarded as object of observation, mind is a cause, producing effects upon the nervous-system; it is an adequate stimulus to the nervous system. Regarded genetically, mind is an effect and not a cause; the brain gives us our representation of the world. The real difficulty lies in understanding that this brain, the generator of our thought, is not known to us; it is not the brain of our thought itself, but an underlying x-brain. The heterogeneity thus disappears, by the suppression of one of its terms.] **O. Decroly** et **J. Degand.** 'Les tests de Binet et Simon pour la mesure de l'intelligence.' [Examination of twenty-seven children, from three to seventeen years of age, four of whom were deaf, and who displayed in general marked differences of intelligence. (1) The tests are already so far perfected as to enable us to classify the majority of cases of intellectual defect or abnormality. (2) They are less adequate to children on the borderline between normality and abnormality. (3) They are inadequate to the classification of deaf and mute children, and (4) of any peculiarities except the intellectual. It is now necessary (1) to shorten and simplify certain tests; (2) to devise new tests of active intelligence, cleverness, *savoir faire*, logic in conduct; (3) to modify the existing tests, or devise new ones, in order to include the deaf, the dull of hearing, and the hearing mutes; and (4) to devise tests of the child's moral and social reactions.] **M. Probst.** 'Les dessins des enfants kabyles.' [All children have the tendency to draw, though aptitudes and faults vary with race. The children investigated observed better than European children; their drawings reflected hereditary mental habits of recent origin, so that it is not possible to compare them with prehistoric draw-

ings. The author gives thirty-five illustrations in support of his theses.] **A. Pick.** 'Sur la confabulation et ses rapports avec la localisation spatiale des souvenirs.' [Certain amnesic patients show a tendency to fill out gaps in their memory by imaginary reminiscences; this phenomenon is termed confabulation. The writer derives it from an unconscious effort after a schema of coexistent events, in which the ideas suggested by the physician or by the patient himself (autosuggestion) may be placed, and thus brings it into connexion with Stout's association by continuity of interest and James's total redintegration. A case is reported, which bears out this interpretation; and children's lies are referred to the same cause.] **A. Maeder.** 'Contributions à la psychopathologie de la vie quotidienne: oublis, confusions, lapsus.' [Analysis of a number of cases, considered (in accordance with Freud's suggestion) as indications of subconscious repugnances, trains of thought, etc.] **H. Zbinden.** 'Influence de l'autosuggestion sur le mal de mer.' [Sea-sickness is probably a neurosis, and may be occasioned or inhibited by autosuggestion.] Recueil des faits: documents et discussions. **Centurier.** 'A propos de la conception psychologique du nervosisme.' [To reduce hysteria, neurasthenia, etc., merely to symptoms, is to oversimplify the facts. There is often little difference between hypnotic suggestion and the 'persuasion' of the physicians who practise psychotherapeutics.] **A. Salmon.** 'L'origine du sommeil et l'hypophyse.' [The specifically recuperative effect of sleep is due to the pituitary secretion.] **E. Claparède.** 'IIme Congrès allemand de Psychologie Expérimentale, Würzburg, 18-21 Avril, 1906.' **C. Werner.** 'Réunion des Philosophes de la Suisse romande, Rolle, 14 Juin, 1906.' **E. Claparède.** 'VIme Congrès d'Anthropologie criminelle et Jubilé de Lombroso, Turin, 28 Avril - 3 Mai, 1906.' Bibliographie. Notes diverses.

Zeitschrift f. Psychologie. Bd. xlii. Heft 6. **H. Cornelius.** 'Psychologische Prinzipienfragen. I.—Psychologie und Erkenntnistheorie.' [Reply to Husserl: (1) The writer does not employ the principle of economy of thought in any biological or teleological context; Husserl's statement that he bases philosophy epistemologically upon a 'complex of facts of adaptation' is erroneous. (2) Husserl's charge of 'psychologism' is also unfounded, since the writer's use of descriptive, non-causal psychology for his epistemology agrees in principle with Husserl's use of phenomenology. Points of difference are (1) that the writer accepts the possibility of the universal validity of phenomenological propositions; (2) that he holds strictly to the principle that no concept shall be employed whose real significance is not at the same time shown by phenomenological analysis; and (3) that he regards this analysis as primarily genetic, genetic investigation being by no means identical with causal.] **D. Katz.** 'Experimentelle Beiträge zur Psychologie des Vergleichs im Gebiete des Zeitsinns.—II.' [In the second part of his inquiry, the author works with standard times of 300, 600, 1,200 and 1,800 σ; the standard time is given once to five times; the interval between repetitions is 1·8 sec., and the interval after the presentation of the standards is 3·6 sec. He finds, in general, that times from his middle zone are correctly estimated, shorter times over- and longer times under-estimated. These results are explicable from the character or 'individuality' of the times themselves. The estimation errors are greater (1) when the interval exceeds 1·8 sec., and (2) when the standard time is frequently repeated. Since in both these cases we have an especial attitude of attention, it may be said that the estimation errors in the field of the 'time sense' appear the more definitely, the

better fitted the experimental conditions are to direct the observer's attention upon the individuality of the times compared.] Literaturbericht. **C. Spearman.** 'Entgegnung.' [Reply to Dürr's critique of the articles on "Proof and Measurement of Association" and "General Intelligence".] **E. Dürr.** 'Erwiderung.' Namenregister. Bd. xliii., Heft 1 und 2. **G. Heymans.** 'Weitere Daten über Depersonalisation und "Fausse Reconnaissance".' [Further data, gained by way of a slightly changed questionary, confirm the results of the author's original inquiry: that a predisposition to the phenomena in question is very closely connected with the tendency to stare blankly at a familiar word; that all the phenomena occur most frequently with persons of slight mental stability; and that their occurrence is favoured by circumstances which temporarily reduce the individual's mental energy. Explanation is to be sought in the lapse or weakening of the associations which mediate the quality of familiarity.] **H. Cornelius.** 'Psychologische Prinzipienfragen. II.—Das Material der Phänomenologie.' [This material consists in the immediately given facts known to each one of us as the events of his mental life: consists, that is, of our experiences or conscious contents. (1) We must be careful to remember that these experiences do not come in isolation, but always as parts of the unitary interconnexion which we know as the entire course of consciousness. (2) We must be careful also to distinguish between immediately and mediately given partial contents: to read into the course of a finite experience, by subsequent reflexion, infinitely numerous successive parts is phenomenologically wrong. (3) We have a knowledge of our experiences, not only in the form of intentional experiences, but also in the phenomenological sense that the real existence of the experiences is in itself a knowledge of them. (4) Intentional experiences must be defined by reference to the merely intentional presentation (*Gegebensein*) of the object in them. (This paragraph contains a critique of Brentano's and Husserl's usage of the term 'act' and 'perception'.) (5) Consciousness, as the material of phenomenology, must consist of all that we adequately perceive *plus* all that is given us in memory as having been earlier experienced. (Critique of Husserl.)] **S. Jacobsohn.** 'Über subjektive Mitten verschiedener Farben auf Grund ihres Kohärenzgrades, I.' [An investigation which continues and extends the work of Fröbes, done in the same laboratory under Müller's supervision. The author's primary problem is to determine, by means of Müller's criterion of 'degree of cohesion,' the subjective mean between two colours (or between a colour and a grey); secondarily, he believes that his results may be of æsthetic value. Part i. describes the conditions under which a series of 'difference-equations' was obtained, and shows (1) that the subjective mean is not a function of the insistence (*Eindringlichkeit*) of stimulus; (2) that it is not possible to calculate the subjective mean from the given mixture-ratios (*Mischungsgewichten*) of the constant colours; and (3) that no general significance attaches to the approximation of the brightness of the subjective mean to the arithmetical or geometrical mean between the brightnesses of the constant colours. Part ii. discusses the physiological and psychological factors which influence judgment. There are three modes of judging: by help of an imagined strip of colours connecting the three impressions, by degree of cohesion, and by the method of mental jumps. The insistence of a colour may vary during a session; where the colours are different, the name of the 'outstanding' colour may occur in consciousness and render it insistent. The assimilation of a given impression to another with which it 'coheres' is a matter of changed physiological adaptation (*Umstimmung*). Very few of the introspective reports contain any æsthetic reference.] Literaturbericht.

Archiv f. d. Gesamte Psychologie. Bd. vii., Heft 3 und 4. **W. Hellpach.** 'Grundgedanken zur Wissenschaftslehre der Psychopathologie.' [This paper of 83 pages, without index of contents and without summary, discusses the theoretical presuppositions of the science of psychopathology. Psychopathology is a psychology, the science of mental disease (*des seelisch Kranken, der Krankheitsvorgänge im Seelenleben*): it stands and falls with the doctrine of psychical causality. Its subject-matter may be defined more nearly as follows: mental disease is any deviation of mental processes from the type that is essentially adverse to society (*schlechthin gemeinschaftswidrig*); mental abnormality is any deviation of mental processes from the type that is detrimental to society or in some partial and circumscribed manner adverse to society. These definitions, however, imply a system of social values, point to the existence of a social norm; and, in so far, fail of being strictly scientific. To gain a more satisfactory formulation, we must examine the methods of psychopathology. After reviewing various possibilities, anatomical, clinical, introspective, anthropometrical, the author concludes that the method required is that of psychological experiment. This has the advantages of objectivity, precision, and analytical character. Its application has many difficulties, and it will not free us altogether of teleology—since that life which is endangered by mental disease is the end or purpose of organised nature. However, it enables psychopathology methodically to deal with the phenomena that fall within its teleologically determined contents; it changes the notion of life as value to the notion of life as phenomenon; and from the preconditions of life, thus ascertained, it derives a definition of what is adverse to life. This settled, there remains the question of the problems of psychopathology; the question of heteronomous or of autonomous work, of dependence on physical disease and its study, or of emancipation from these. Here theory and practice are, at the present day, sharply at odds. There can, however, be no doubt that, as there are a psychology and a social psychology, so there are also a psychopathology and a social pathology (*Gemeinschaftspathologie*). After a discussion of the problems which constitute this department of science, a rejection of the popular errors due in part to false analogy, and an illustrative exposition of certain forms of social disease, the writer ends with a decision in favour of the autonomy of psychopathology.] **E. Abb.** 'Kritik des Kantschen Apriorismus vom Standpunkte des reinen Empirismus aus, unter besonderer Berücksichtigung von J. St. Mill und Mach.' [After an introductory chapter, which gives a general sketch of the Kantian apriori and of pure empiricism, the writer discusses in special chapters: necessity of thought as a criterion of the apriori (Göring); space (Wundt) and time (Riehl); Kant's mathematical apriori and mathematical empiricism; the belief in an external world (Laas); and, within the doctrine of categories, causality and substance. Ultimately, empiricism in its conflict with apriorism rests upon the law of parsimony. The appeal is justified; the attempts to prove derivative principles which apriorism had taken as original are entirely in order; and, in so far as Kant's apriori is affected by them, it must give way: indeed, that it has given way is shown by the fact that certain Kantians refuse to interpret the originality of the apriori in psychological terms, and give it an exclusively transcendental significance. Kant's assumption of a plurality of aprioristic forms and concepts must be reduced to the postulation of an original spontaneity of the mind—of the aprioristic character of apperception and of the laws of thought which derive directly from apperception. How far empirical or aprioristic factors come into consideration for the various fundamental concepts and

principles of knowledge must be decided by impartial genetic inquiry. Answering this question in the light of genesis, we may hope to answer the final epistemological question of the validity of these principles and concepts.] **J. W. Baird.** 'Erwiderung.' [Reply to criticism by Kirschmann.] **A. Kirschmann.** 'Bemerkungen zu vorstehender Erwiderung.' Literaturbericht. **V. Benussi.** 'Die Psychologie in Italien. I.—Experimentalpsychologie.' **A. Vierkandt.** 'Jahresbericht über die Literatur zur Kultur- und Gesellschaftslehre für die Jahre 1904 und 1905.' Einzelbesprechungen. Referate.

KANT-STUDIEN. Vol. xi. Nos. 3, 4. November, 1906. **Dr. Walter Frost.** 'Kants Teleologie.' [The author shows first that Kant's treatment of Teleology is thoroughly *dialectical, i.e.*, that Kant is not putting forward a single well-defined view of Teleology, but, on the contrary, is distinguishing at least three separate points of view from which Teleology may be regarded. Each of these points of view possesses a measure of truth and is, so far, legitimate, but it is not necessarily reconcilable with the others. The contradictions, therefore, which have been found in Kant's treatment disappear when we realise its dialectical character. The author next discusses the main points of Kant's Teleology with notes on special paragraphs, and finally sums up the points which seem to him new and important in Kant's discussion of the problem.] **Anna Tumarkin.** 'Zur transcendentalen Methode der Kantischen Aesthetik.' [The conception of 'Spiel der Kräfte' is the central point of Kant's Philosophy of Art, not (as Busch and Schlapp have thought) the conception of genius. The author criticises Kant for having, in addition, made æsthetic *pleasure* an essential part of the æsthetic experience without giving an explanation of that pleasure on the basis of his principles. She suggests how modern psychology might on this point supplement Kant's treatment.] **R. Eucken.** 'Ein neues Buch über Fichte.' [A short review of F. Medicus' recent book on Fichte.] **E. Sänger.** 'Kant's Auffassung von der Bibel.' [Draws attention to a number of passages on the Bible and Bible-teaching to be found in the last volume of *Lose Blätter aus Kants Nachlass.*] **August Messer.** 'Die Philosophie im Beginn des zwanzigsten Jahrhunderts.' [A long and careful review of this book which was edited by Windelband in commemoration of Kuno Fischer's eightieth birthday.] **W. Reinecke.** 'Eine französische Huldigung an Kant.' [A review of the special number published by the *Revue de Métaphysique et de Morale* in commemoration of the centenary of Kant's death. The discussion and criticism of the articles dealing with mathematical and logical problems is specially full.] **E. v. Aster.** 'Der iii. Band der Kant-Ausgabe.' [A review of this volume with some text-critical comments.] **Joh. Zahlfleisch.** 'Zu Kants Krit. d. r. V. s. 651 (Kehrbach) im Zusammenhang des K'. schen Systems.' Reviews. Selbstanzeigen. Notes. Vol. xii. No. 1. February, 1907. **Ernst Cassirer.** 'Kant und die moderne Mathematik.' [A reply to Couturat's contention that the modern development of Mathematics invalidates Kant's treatment of Mathematics in the Transcendental Æsthetic. Dr. Cassirer admits that Kant cannot be defended by taking up a hostile attitude to modern developments. 'The fate and future of the critical philosophy depends on its relation to exact science. If the link between the critical philosophy and mathematics and mathematical physics were broken, the former would be deprived of all its value and content.' And, of course, science must go its own way, we cannot treat the form it had in Kant's day as final. But, on the other hand, the validity of Kant's philosophy is not bound up with the maintenance of that form. The modern development of Mathematics, of which Dr. Cassirer traces the fundamental principles in outline, is legiti-

mate and important, but it does not touch Kant's peculiar problem. For modern Mathematics, being the highest development of formal logic, deals in pure abstractions; it develops the implications of a system of hypothetical presuppositions, without asking whether its conclusions apply to, or are ever realised in, concrete experience. Kant's problem, on the other hand, arises just out of the applicability of 'pure' mathematics to the empirical object. This epistemological problem lies wholly outside the region of pure—or in Cantor's phrase 'free'—mathematics. It is the problem of the part played by mathematical principles (whatever they are) in the structure of our empirical knowledge of objects. Hence, however modern mathematicians may develop their science, neither Kant's problem nor his solution are affected.] **Fritz Medicus.** 'Kant und die gegenwärtige Aufgabe der Logik.' [Beginning with Kant's dictum that formal Logic has been a complete science since the days of Aristotle, and that no problems are left for it to solve, the author shows that Kant's own transcendental Logic, once it is thoroughly emancipated from its dependence on the traditional divisions of formal Logic (still found in Kant), is inevitably driven on to the problem of a 'Systematik' of the categories to be built up by a dialectical development. This systematisation of the categories in the light of an 'idea of absolute knowledge' was attempted by Fichte and Hegel. Hegel, however, is criticised for making the principle of negativity the moving factor in the dialectical development. No category by itself leads to its own other; its inadequacy can be discovered only when we measure it against the absolute idea, and this alone supplies the moving power. Laying down, then, the principle that 'all theoretical activity has for its end the identity of the Ego with itself,' the author discusses in the light of it the three fundamental principles of formal Logic, *viz.*, Identity, Contradiction, Excluded Middle. His conclusion is: 'Der durchgeführte Kritizismus ist die Dialectik,' but this implies a complete inversion of Kant's treatment of the categories. For Kant they were means towards objective knowledge; for Dr. Medicus they are themselves the end and true objects of knowledge: 'all investigation into substances (*e.g.*, chemical substances) has for its aim Substance-as-such; all inquiry into causal connexions strives after knowledge of Causality-as-such'.] **Oscar Ewald.** 'Die Grenzen des Empirismus und des Rationalismus in Kant's *Kritik der reinen Vernunft*.' [The 'thing-in-itself' has an ambiguous position in Kant's *Kritik*. On the one hand, it is interpreted as the all-inclusive ideal of reason; on the other, when treated as the 'cause' of sensations, it stands for the mere 'x,' the limit of knowledge; it is a symbol of the irrational element in experience. These ambiguities about the thing-in-itself show how a tendency towards Rationalism mixes with a tendency towards Empiricism. The author then attempts to show that the same two tendencies appear in the categories. These suffer from 'empirische Behaftung,' *i.e.*, they contain empirical elements not merely in that they require to be applied to a matter of sense, but in that their very nature and inner structure contains empirical elements.] **H. Staeps.** 'Das Christusbild bei Kant.' [Kant is interested not in the historical personality of Christ, but in the moral ideas and ideals which he represents.] **W. B. Waterman.** 'Kant's Critique of Judgment.' Reviews. Selbstanzeigen. Mitteilungen. Annual Report of the Kantgesellschaft.

Vierteljahrsschrift für Wissenschaftliche Philosophie und Soziologie. Jahrgang xxx., Heft 4. December, 1906. **Georg Wernick.** 'Der Wirklichkeitsgedanke.'—iii. Artikel. [Discusses Association, insisting on its different kinds. To regard a content as real means connecting it with the totality of the sensuously given through simul-

taneous or successive associations of similarity. Characterisation of the various senses. Discussion of the reality of Space and Time.] **E. v. Aster.** 'Über die erkenntnistheorethischen Grundlagen der biologischen Naturwissenschaften. Mit spezieller Rücksicht auf: A. Pauly, "Darwinismus und Lamarckismus".' [Opposes Pauly's use of subjective teleology as a principle of explanation. Objective teleology must form the basis of our consideration of organic nature. There is a gulf between the inorganic and organic which cannot be bridged by scientific knowledge.] **P. Barth.** 'Die Geschichte der Erziehung in soziologischer Beleuchtung.'—v. [Christian society in the Roman Empire, and the Society of the Germanic peoples in the first half of the Middle Ages, along with the educational efforts of Charlemagne, are among the subjects discussed.] **Karl Marbe.** 'Beiträge zur Logik und ihren Grenzwissenschaften.' (1. Zur Lehre von den Merkmalen. 2. Wundt über das Urteil. 3. Wortbedeutung und Begriffslehre.) Berichtigung. Besprechungen. Entgegnung. Notiz. Zeitschriften. Bibliographie.

Archiv für Systematische Philosophie. Neue Folge. Bd. xii., Heft 4. November, 1906. **Hermann Graf Keyserling.** 'Ein Beitrag zur Kritik des Glaubens.' [Faith has not to do with what we do not, or do not yet, know. It is the fundamental presupposition of all knowledge. It is immediately related to Being; the Being of the subject and faith in the existence of the object are polar correlates.] **Max Frischeisen-Köhler.** 'Über die Grenzen der naturwissenschaftlichen Begriffsbildung.'—II. [Continues the criticism of Rickert under: 1. Die Geschichte als Wirklichkeitswissenschaft. 2. Die Wertbeziehung als Prinzip der historischen Begriffsbildung.] **Marie Joachimi-Dege.** 'Das Wesen des menschlichen Seelen- und Geisteslebens.' [An appreciation of a work under that title by Generalarzt Berthold Kern. This work, founded on "eine genauere Fassung der Kantischen Erkenntniskritik," eliminates from it the Thing-in-itself, the Ideas as postulates, and the basing thereon of the Practical Reason. Concludes in favour of Psychophysical Parallelism properly understood: "Nicht bloss das Gehirn . . . sondern das ganze leibliche Leben ist das physische Äquivalent des Seelenlebens". Opposes the "dominant view" that our brain is the sole seat of thought, feeling and sensation.] **Richard Skala.** 'Zum "Kritischen Idealismus".' [Critical Idealism transcends the logical limits of Idealism.] **R. Seligmann.** 'Der ökonomische Güterwert als Wille zur Arbeit.'—I. Allgemeines. [The value-feeling a psychological synthesis of a present state of feeling and the presentation of an object thereto related.] **Branislav Petronievics.** 'Über die Wahrnehmung der Tiefendimension.' [A consideration of the mathematical and psychological arguments for and against. As to the former, supports Stumpf, on the whole, as against Lipps. In connexion with the latter, advances the view that: das *Helle* stets eine durchsichtige dreidimensionale Empfindung ist.] **David Koigen.** 'Jahresbericht über die Literatur zur Metaphysik.'—III. [Fortsetzung.] Neuste Erscheinungen. Systematische Abhandlungen in den Zeitschriften. Eingegangene Bücher.

IX.—NOTES AND NEWS.

CERTAINTIES, IMPOSSIBILITIES AND VARIABLES.

The misleading statement of his position (unconsciously misleading, of course) by Mr. MacColl in the postscript to his article in the Oct. number of MIND ought not, I think, to pass without notice. In the first place he leads his readers to suppose that if he can make good his position on the question of 'impossibilities' he will have refuted the whole of my criticism. Secondly, by drawing attention to the word 'impossibility' rather than the word 'certainty' he makes the case against him much less clear than it really is. And, thirdly, in confining himself to this word, he quotes a sentence from me, which, though explicitly given by me as a rendering of his 'impossibilities,' he presents to the reader as having reference to events which are at the present time impossible.

Now there are two other very important points in which I disagree with Mr. MacColl, and he ought to have said so. One of these has reference to the Universe of Discourse, in his account of which I maintain he is involved in self-contradiction. Here Mr. Russell and I are, I believe, in complete agreement that Mr. MacColl has failed to distinguish between philosophical and logical existence. This question of existence is of fundamental importance.

As regards 'impossibilities,' which Mr. MacColl denotes by η, and 'certainties,' which he denotes by ϵ, he accuses me of mixing up logic and psychology. The matter amounts to this: when Mr. MacColl says 'it is certain that x is y,' he holds that there is here no reference to any thinker. I hold that there is such a reference. To say that a proposition is certain means that *all persons are so constituted that they must believe that the proposition is true.*

And, thirdly, Mr. MacColl reads the sentence which he quotes from me as though it referred to events which are at the present time impossible, while it explicitly refers to what he means by the term 'impossible'. It is well to dwell upon his criticism here, because it shows what an illusion he is under as to the value of his classification of propositions. On page 496 of MIND, N.S., No. 24 he says: "We have often to consider not merely whether a statement is *true* or *false*, but whether it is a *certainty*, like $2 + 3 = 5$; an *impossibility*, like $2 + 3 = 8$; or a *variable* (neither always true nor always false), like $x = 4$". Now $2 + 3 = 8$ is not an impossibility of the kind that "old women ride through the air on broomsticks" is: the former is a proposition whose truth is inconceivable, while the latter is merely a statement of something which, so far as we know, is physically impossible. Hence I hold that $2 + 3 = 8$ may be rendered "a person is so constituted that he cannot believe that $2 + 3 = 8$," or "a person who believes that $2 + 3 = 8$ does not exist". I do *not* hold that the statement of the physical

impossibility can be rendered "a person who believes that old women ride through the air on broomsticks does not exist". Mr. MacColl should have kept to his own use of the word 'impossibility,' and then he would perhaps have seen that my rendering of it is adequate, and thus that his 'impossibilities' can be brought within the scope of the ordinary Symbolic Logic.

By way of bringing this question to a final settlement, we may take Mr. MacColl's statement about figure 3 on page 507 of the same article. Here he says "neither a nor β can possibly be true . . . so that we have $a\eta$," *i.e.*, a is an 'impossibility'. In other words his 'impossibility' is "what cannot possibly be true," and this refers to such statements as $2 + 3 = 8$, and not to statements about old women and their methods of locomotion.

A. T. Shearman.

MIND ASSOCIATION.

The Annual General Meeting will be held in Balliol College, Oxford, on Saturday, 1st June, at 5 P.M.

The following gentlemen have joined the Mind Association since the printing of the last number:—

Moberly (W. H.), Lincoln College, Oxford.
Osgood (G. L.), Rue Bellot, Geneva, Switzerland.
Waterton (S. P.), 17 Wilmslow Road, Withington, Manchester.

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

I.—REALITY AND THE CRITERION FOR THE TRUTH OF IDEAS.

By Prof. John Dewey.

Among the influences that have worked in contemporary philosophy towards disintegration of intellectualism of the epistemological type, and towards the substitution of a philosophy of experience, the work of Mr. Bradley must be seriously counted. One has, for example, only to compare his metaphysics with the two fundamental contentions of T. H. Green, namely, that reality is a single, eternal and all-inclusive system of relations, and that this system of relations is essentially one with that process of relating which constitutes our thinking, to be instantly aware of a changed atmosphere, and to call to mind how much of Bradley's writings is a sustained and deliberate polemic against intellectualism of the Neo-Kantian type. When, however, we find conjoined with this criticism an equally sustained contention that the philosophic conception of reality must be wholly based on an exclusively intellectual criterion, a criterion belonging to and confined to theory, we have a situation as perplexing as it is thought-provoking. The situation grows in interest when it is remembered that there is a general and growing tendency among those who appeal in philosophy to a strictly intellectualistic method of defining reality, to insist that the reality thus reached is itself no more rational in character than it is volitional (or an affair of purpose) or than it is a case of pure and immediate sentiency: or, more strictly, that the intellectual, affectional and volitional features are, in 'ultimate' reality,

qualitatively transformed by some process of mutual absorption and reciprocal fusion. This, then, is the curious character of the situation: Reality is an 'absolute experience' in which the intellectual as such is simply one transmuted moment; yet this reality is attained unto, in philosophic method, by exclusive emphasis upon the intellectual aspect of present experience and by systematic exclusion of exactly the emotional, volitional features which with respect to content are insisted upon! Under such circumstances the cynically-minded are moved to wonder whether this tremendous insistence upon one factor in present experience at the expense of others, is not because this is the only way to maintain the notion of 'Absolute Experience,' and to prevent it from collapsing into ordinary every-day experience. In any case the thesis I wish to maintain is that Mr. Bradley's Absolute Experience, resting ultimately upon a rationalistic conception of the criterion of truth, is a temporary half-way house into which travellers from the territory of Kantian epistemology may temporarily turn aside in their journey towards the land of a philosophy of every-day experience.

First let us set before ourselves the general points of Mr. Bradley's indictment of intellectualism.[1] Knowledge or judgment works by means of thought. It is predication of idea (meaning) of reality as its subject. Its final aim is to effect a complete union or harmony of existence and meaning. But it is fore-doomed to failure, for in realising its end it must employ means which contradict its own purpose. This inherent incapacity lurks in judgment with respect to subject, predicate and copula. The predicate or meaning necessary to complete the reality presented in the subject can be referred to the latter and united with it only by being itself alienated from existence. It heals the wounds or deficiencies of its own subject (and in the end all deficiencies are to Mr. Bradley discrepancies) only on condition of inflicting another wound,—only by sundering meaning from a prior union with existence in some other phase. This latter existence, therefore, is always left out in the cold. It is as if we wanted to get all the cloth in the world into one garment and our only way of accomplishing this were to tear off a portion from one piece of goods in order to patch it on to another.

The subject of the judgment, as well as the predicate,

[1] I follow chiefly chapter xv. of *Appearance and Reality*—the chapter on "Thought and Reality".

stands in the way of the judgment's fulfilling its own task. It has "sensuous infinitude" and it has "immediacy," but these two traits contradict each other. The details of the subject always go beyond itself, being indefinitely related to something beyond. "In its given content it has relations which do not terminate within that content" (*ibid.*, p. 176), but in its immediacy it presents an undivided union of existence and meaning. No subject can be mere existence any more than it can be mere meaning. It is always existent or embodied meaning. As such it claims individuality or the character of a single subsistent whole. But this indispensable claim is inconsistent with its ragged-edged character, its indefinite external reference, which is indispensable to it as subject that it may require and receive further meaning from predication.

With respect to the copula the following quotation from the *Principles of Logic* (p. 10) may serve: "Judgment proper is the *act* which refers the ideal content (recognised as such) to the reality beyond the act". In other words, judgment as act (and it is the act which I take it is expressed in the copula) must always fall outside of the content of knowledge as such; yet since this act certainly falls within reality, it would have to be recognised and stated by any knowledge pretending to competency with respect to reality as a whole.[1]

From every point of view, then, knowledge operates under conditions, and these not externally imposed but inherent in its own nature as judgment, which render it incapable of realising its aim of complete union of existence and meaning. Granted the argument, and it is difficult to imagine a more serious indictment against the pretensions of philosophy to reach reality *via* the exclusive path of knowledge.

The presence of contradiction is Mr. Bradley's criterion for "appearance," just as its absence is his criterion for "reality". It thus goes without saying that knowledge and truth (as fulfilment of the specific function of knowledge) are matters of appearance. This is not merely a logical deduction from Mr. Bradley's position, but is expressly

[1] Possibly added interest attaches to this last dilemma because Bradley seems to conceive of this act as essentially psychical in nature. It would be interesting to have more explicit details as to just how judgment as psychical act manages to keep house with judgment as logical content. We appear to have here either the postulate of a miracle, namely that a purely psychical somewhat gets outside of itself to perform an act which takes effect entirely in the region beyond itself, or else we have a position which logically developed leads to pure subjectivism. It would be interesting to know just how Mr. Bradley conceives this result of pure scepticism to be avoided.

stated by him. "Thus the truth belongs to existence, but it does not as such exist. . . . Truth shows a dissection but never an actual life" (*Appearance and Reality*, p. 167). Again, "every truth is appearance since in it we have divorce of quality from being" (*ibid.*, p. 187). "Even absolute truth seems in the end to turn out erroneous. . . . Internal discrepancy belongs irremovably to truth's proper character. . . . Truth is one aspect of experience and is therefore made imperfect and limited by what it fails to include" (*ibid.*, pp. 544-545). Nothing could be more explicit as to the inherently contradictory character of truth, both as an ideal and as an accomplished fact; nothing more positive as to the unreality or appearance-character of truth.

Moreover there is ground for holding not merely that knowledge itself is inherently discrepant and thus in the realm of 'appearance,' but that the existence anywhere of self-contradiction and thus of appearance, is always due to the process of knowing: that the burden of the very existence of appearance as distinct from reality has to be borne by the intellectual function. Speaking of thought he says: "The relational form is a compromise on which thought stands and which it develops". And all the particular antinomies which he discusses are interpreted as having their basis in the category of relation (*ibid.*, p. 180). In his section on Appearance he goes through various *de facto* aspects and distinctions of the world, such as primary and secondary qualities, the relation of substance to its properties, the matter of relation to qualitative elements, space and time, motion and change, causation, etc., pointing out irreconcilable discrepancies in them. He does not, in a *generalised* way, expressly refer them to any common source or root. But it seems to be a fair inference that it is the relational character of thought which is at the bottom of the whole trouble: so that we have in the cases mentioned realised *in concreto* precisely the same situation which is set forth *in abstracto* in the discussion of thought. The contradictions brought up are in every case resolvable into the fundamental discrepancy supposed to exist between relation and the elements which are related. In each case there is the ideal of a final unity in which relations and elements as such disappear, while in every case the elements and the relation are so related as to prevent the desired consummation. In at least one place, it is expressly declared that it is the knowledge function which is responsible for the degradation of reality to appearance. "We do not suggest that the thing always itself is an appearance. We mean its character is

such *that it becomes one as soon as we judge it.* And this character we have seen throughout our work, is ideality. Appearance consists in the looseness of content from existence. . . . And we have found that everywhere throughout the world such ideality prevails" (*ibid.*, p. 486, italics not in the original).

I have no respect for proof-text methods, and I should certainly not quote these selected passages did they not seem to be conspicuously representative of the tenor—and the fundamental difficulty—of the whole position. On the one hand, as I have said, there is a systematic discrediting of the ultimate claims of the knowledge function, and this not from external physiological or psychological reasons such as are sometimes alleged against its capacity, but on the basis of its own interior logic. But on the other hand we find the strictly logical criterion deliberately stated and employed as the fundamental and final criterion for the philosophic conception of reality. Long familiarity has not dulled my astonishment at finding exactly the same set of considerations which in the earlier portion of the book are employed to condemn reality as experienced by us to the region of Appearance, employed in the latter portion of the book to afford a triumphant demonstration of the existence and general character of Absolute Reality. The argument I shall take up first on its formal side and then with reference to material considerations.[1]

The positive conception of reality is reached on the basis of the conception that "ultimate reality must be such that it does not contradict itself; here is an absolute criterion. And it is proved absolute by the fact that either in endeavouring to deny it or even in attempting to doubt it, we tacitly assume its validity" (*ibid.*, pp. 136-137). That is to say when one sets out to think one must avoid self-contradiction; this avoidance, or, put positively, the attainment of consistency, harmony, is the basic law of all thinking. Since in thinking we set out to attain reality, this implies that reality itself must be self-consistent, and that its self-consistency determines the law of thought. Or, as Mr. Bradley again puts the matter, "In order to think at all you must subject yourself to the standard, a standard which implies an absolute knowledge of reality; and while you doubt this, you accept it, and obey, while you rebel" (*ibid.*, p. 153). The absolute knowledge referred to is, of course,

[1] The crux of the argument is contained in chapters xiii. and xiv., on the General Nature of Reality.

the knowledge of the thoroughly self-consistent, non-contradictory character of reality. Every reader of Mr. Bradley's book knows how he goes on from this point to supply positive content to reality ; to give an outline sketch of the characters it must possess and the way in which it must possess them in order to maintain its thoroughly self-consistent character. It is, however, only the strictly formal aspect of the matter that I am at first concerned with.

On this side we reach, I think, the heart of the matter by asking, in reference to the first quotation : Absolute *for what ?* Surely absolute for the process under consideration, that is absolute for thought. But the significance of this absolute for thought is, one may say, " absolutely " (since we are here confessedly in the realm just of thought) determined by the nature of thought itself. Now this nature has been already referred by considerations " belonging irremovably to truth's proper character," to the world of appearance and of internal discrepancy. The further observation that a method, involving inherent self-contradiction, has a certain postulate involves, logically, the self-contradictory character of that postulate. It can only sum up the contradiction scattered through concrete thinkings. Accordingly the fact that thought as such has an absolute criterion is just one proof the more of thought's zealous and unremitting activity in the cause of evolving mere ideality—disruption of meaning from existence. Yes, one may say, the criterion of thought is absolute — that is to say absolute or final for thought; but how can one imagine that this in any way alters the essential nature and value of thought? If knowledge works by thought, and thought institutes appearance over against reality, any further fact about thought—such as a statement of its criterion—falls in its import wholly within these limits. It is comical to suppose that a special trait of thought can be employed to alter radically the fundamental and essential nature of thought. The criterion of thought must be infected by the nature of thought, instead of being a redeeming angel which at a critical juncture can transform its fallen character.

There really seems to be ground for supposing that the whole argument turns on an ambiguity in the use of the word " absolute ". Keeping strictly within the limits of the argument, it means nothing more than that thinking has a certain principle, a law of its own ; that it has an appropriate mode of procedure which must not be violated. It means, in short, finally controlling for the thought-function. But Mr. Bradley immediately takes the word to mean

absolute in the sense of describing a reality which by its very nature is totally contradistinguished from appearance —that is to say, from the realm of thought. Upon the ambiguity of a word, the systematic indictment of intellectualism becomes the corner-stone of a systematically intellectualistic method of conceiving reality!

Mr. Bradley, it may be said, has recognised this difficulty and adequately disposed of it. He takes up, for example, this question: "Why is the theoretical to be superior to the practical end? I have never said that this is so, only *here*, that is in *metaphysics*, I must be allowed to reply, we are acting theoretically. . . . The *theoretical standard within theory must surely be absolute*" (p. 153. The italics again are mine; compare with the quotation this, from p. 485: "Our attitude, however, in metaphysics must be theoretical". So, also, p. 154, "Since metaphysics is mere theory and since theory from its nature must be made by the intellect, it is here the intellect alone which is to be satisfied"). Once more, very well; but if the incapacity of theory to reach anything beyond the realm of appearance has already been established, how does the supremacy of the theoretical standard within theory, prove anything more than that the standard of thought is infected with the same self-contradictory nature that troubles thought itself? The elaborate structure of absolute experience, perfect, unchanging, all-inclusive, is, from the logical point of view, simply another example of the appearance-character of knowledge products; it simply shows how far thought can go in the perpetuation of internal discrepancies. It is quite true, as Mr. Bradley says (p. 153), that if a man sits down to play the metaphysical game, he must abide by the rules of thinking; but if thinking be already, with respect to reality, an idle and futile game, simply abiding by the rules does not give additional value to its stakes. Grant the premises as to the character of thought, and the assertion of the final character of the theoretical standard within metaphysics—since metaphysics is a form of theory—is a warning against metaphysics. If the intellect involves self-contradiction, it is either impossible that it should be satisfied, or else self-contradiction *is* its satisfaction.

The transition from the purely formal to the material side of the discussion is made by realising that while Mr. Bradley declares that the standard of consistency in itself is "but formal and abstract" (p. 144); that in itself it is "mere theoretical consistency" (p. 147), yet it is this "theoretical consistency" which "guarantees that reality is a self-con-

sistent system" (p. 148). The gist of the argument is that since thought demands self-consistency, absolute reality must be something in which all the discrepancies, deficiencies, loose ends, etc., of actual experience are found built into perfect unity. The argument is from the formal consistency of thinking to the material consistency of all the constituents of reality.[1]

Now if we remember the prior declarations that thought is and must be self-discrepant in its workings, we find a highly suggestive situation presented to us. Reality, in Mr. Bradley's philosophy, appears twice over; it enacts different *rôles*. On the one hand, it presents itself as an Absolute, ultimate reality, an eternal and all-inclusive experience; on the other hand, it presents itself as "*our* experience," as something riddled with discrepancies, everywhere at odds with itself, or as Appearance. Recall that this Jekyl-Hyde conception of reality is the result of the attempt to define reality on the basis of a purely theoretical standard, "the intellect *alone*," and the situation seems made to order as an illustration of the theory of the self-contradictory character of thought, *viz.*, the persistent alienating of existence and meaning in the very effort to unite them. What is reality in its absolute character except the meaning-function taken *in toto*, once for all? What is the appearance-character except the existence aspect taken in an equally wholesale way?

The intellectualism of Mr. Bradley's philosophy is well represented in the statement that it is "the theoretical standard which guarantees that reality is a self-consistent system" (p. 148). It is the use of a strictly theoretical criterion as a basis for ascribing in guaranteed fashion a certain character to reality which is the point at issue. But how can the fact that the criterion of thinking is consistency be employed to determine the nature of the consistency in question? Consistency in one sense, consistency of reasoning with itself, we know; but what is the nature of the consistency in reality to which this consistency refers? Thinking without doubt must be logical; but does it follow from that that the reality about which one thinks, and about which one must think consistently if one is to think to any purpose, must itself be already logical? The pivot of the argument is, of course, the old ontological argument, stripped of all theological irrelevancies and reduced to its fighting weight as a metaphysical proposition.

[1] I am relieved from dealing with this problem in itself by the thoroughness with which it has already been considered in MIND by Prof. Sidgwick and Mr. Knox, see Nos. 53 and 54, N.S.

Those who question this basic principle of intellectualism in all its forms will, of course, question it here. They will urge instead of consistency in reality resting on the basis of consistency in the reasoning process that the latter derives its meaning from the material consistency at which it aims. They will say that the definition of the nature of the consistency which is the end of thinking and which prescribes its technique is to be reached from inquiry into such questions as these: What sort of an activity in the concrete is thinking? what are the specific conditions which it has to fulfil? what is its use; its relevancy; its purport in present concrete experiences? They will claim that to use the requirement of non-contradiction in thought as a basis for inferring the non-contradictory nature of reality, while the character of reality is then employed in order to make thought something more than merely formal, to give it a content of its own independent of other functions of life, is to offer us a begging of the question in lieu of its solution. The more it is insisted that the theoretical standard—consistency—is final within theory, the more germane and the more urgent is the question: What then in the concrete *is* theory? and of what nature is the real consistency which is the test of its formal consistency?[1]

With all our heart, the standard of thinking is absolute (that is final) within thinking, but what is thinking? The standard of black-smithing must be absolute within black-smithing, but what is black-smithing? No prejudice prevents acknowledging that black-smithing is one practical activity existing as a distinct and relevant member of a larger system of such activities: that it is because men use horses to transport persons and goods that horses need to be shod; and that the ultimate criterion of black-smithing is producing a good shoe. In this case, it is easily seen that the ultimate character of the end for the operation is proper evidence that the operation itself is not ultimate, but relative

[1] This suggests that many of the stock arguments against pragmatism fail to take its contention seriously enough. They proceed from the assumption that it is an account of truth which leaves untouched current notions of the nature of intelligence and of intellectual statements, positions, ideas, etc. But the essential point of pragmatism is that it bases its changed account of truth on a changed conception of the nature of intelligence, both as to its objective and its method. Now this different account of intelligence may be wrong, but controversy which leaves standing the conventionally current theories about thought and ideas and merely discusses 'truth' will not go far. Since truth is the adequate fulfilment of the function of intelligence, it is clear the whole question turns on the nature of the latter.

and instrumental. Is there anything in the logic of the case which excludes analogous ideas holding good for the function of thinking and hence for its criterion, consistency? It may be that the contradictions which, according to Mr. Bradley, inhere in thought, do not belong to it in its proper character, taken in its real connexions with other functions of experience; but are found in it because it has been looked at wrongly; because it has been made unreal by isolation.

It is then the positive object of this paper to show the interpretation to be put upon the ideas of inconsistency, harmony, etc., with respect to thought, when this is not isolated, but taken in its nature, place and workings within experience. Since the difficulty of Mr. Bradley has turned out to be that thought can be made supreme only by isolating it, and that when isolated all its processes and results are found to be infected, tainted, with self-contradictions, it would seem, even on formal grounds, to be the part of wisdom to change the point of view, the underlying hypothesis, and to see what becomes of its work and of the criterion for the well doing of that work, when thought is regarded as serviceable, and hence as organically linked with other modes of practice.

Let us then start from another supposition. Let us assume that among real objects in their values and significances, real oppositions and incompatibilities exist; that these conflicts are both troublesome in themselves, and the source of all manner of further difficulties—so much so that they may be suspected of being the source of all man's woe, of all encroachment upon and destruction of value, of the good. Suppose that thinking is, not accidentally, but essentially a way, and the only way which proves adequate, of dealing with these predicaments—that, in short, being "in a hole," in difficulties, *is* the fundamental 'predicament' of intelligence. Suppose that effort is made in a brute way to remove these oppositions and to secure that arrangement of things which means satisfaction, fulfilment, happiness. This state of things would clearly mean harmony. Suppose, once more, the method of brute attack, of trying directly to force warrings into peace were to fail; and there were then effort to effect the transformation by an indirect method—by inquiry into the disordered state of affairs and by framing views, conceptions, of what the situation would be like if it were reduced to harmonious order. Finally, suppose that upon this basis a plan of action to be worked out, and that this plan when carried into overt effect succeeded infinitely better than the brute method of attack in bringing about the

desired consummation. Suppose again this indirection of activity is precisely what we mean by thinking. Would it not hold that harmony is the end and the test of thinking? that observations are pertinent and ideas correct just in so far as, overtly acted upon, they succeed in removing the undesirable, the inconsistent, and in securing fulfilment?

This conception of thinking and its test may not be valid; that is not the point here at issue. The question is whether it is not a possible, reasonable alternative hypothesis concerning the nature, the criterion and correct precedure of thinking. Is there anything in the fact that consistency is a final criterion for thinking which renders self-contradictory such an interpretation of the meaning of consistency? Until otherwise informed, one must insist that the fact that the criterion of thinking is consistency cannot be employed to validate one special definition of consistency and to rule out another special definition.

But, it is said, the very process of thinking makes a certain assumption regarding the nature of reality; *viz.*, that reality is self-consistent. This statement, to my mind, involves a subtle confusion of two different ideas. Thinking in the concrete is certainly an assumption regarding reality; thinking in the concrete also assumes consistency as its own criterion. But why should the assumption regarding reality be other than that the specific realities with which thought is concerned are *capable of receiving* harmonisation? To say that thought must assume, in order to go on, that reality already possesses harmony is to say that thought must begin by contradicting its own direct data, and by assuming that its concrete aim is vain and illusory; it puts upon thought the onus of introducing discrepancies into reality in order just to give itself exercise in the gymnastic of removing them. The assumption which concrete thinking makes about reality is that reality in its achieved form is such that, *through activity guided by thinking*, it may *acquire* a certain character which it is excellent for it to possess; and may acquire it more liberally and effectively than by other methods. One might as well say that the blacksmith could not think to any effect concerning iron, without a Platonic archetypal horseshoe, laid up in the heavens. His thinking makes an assumption about present, given reality, to the effect that this piece of iron, through the exercise of intelligently directed activity, may be shaped into a satisfactory horseshoe. What stands out here is that the assumption is practical: the assumption that a specific reality may take on in a specific way a specific needed value. Moreover, the

test of this assumption is practical, consisting in acting upon it to see if it will do what it pretends it can do, namely guide the activities to the required result. The assumption about reality is not something in addition to the idea, which an idea already in existence makes; the assumption about reality *is* the idea and this assumption is that reality may through certain activities secure its own harmonisation.

These remarks have a two-fold purpose. They are intended to show that the fact that consistency is a criterion of thinking does not solve but poses the problem of its nature, and to suggest that recourse to the concrete facts of experience indicates that consistency is practical in nature.[1]

As an illustration of the specific as distinct from the 'at large' way of defining consistency, let us take the example of the man who wishes to deny the criterion of self-consistency in thinking. Is he refuted by pointing to the 'fact' that eternal reality is eternally self-consistent? Would not his obvious answer to such a mode of refutation be: "What of it? What is the relevancy of that proposition to my procedure in thinking here and now? Doubtless absolute reality may be a great number of things, possibly very sublime and precious things; but what I am concerned with is a particular job of thinking, and until you show me the intermediate terms which link that job to the asserted self-consistent character of absolute reality, I fail to see what difference this doubtless wholly amiable trait of reality has to do with what I am here and now concerned with. You might as well quote any other irrelevant fact, such as the height of the Empress of China." We take another tack in dealing with the man in question. We call his attention to his specific aim in the situation with reference to which he is thinking, and point out the conditions that have to be observed if that aim is to fulfil itself. We show that if he does not observe the conditions which his aim imposes his thinking will go on so wildly as to defeat itself. It is con-

[1] Mr. Bradley has very properly attacked the conception of 'mere practice' or "the abstraction of activity and of function from the quality of its object" (MIND "On Truth and Practice," vol. xiii., p. 25). Very properly, that is, if there be any one anywhere who entertains any such notion of "practice" and "practical". It appears, however, to be such a thoroughly intellectualistic construction, such an obvious abstraction, that I cannot believe any empiricist has ever entertained it. As an indication of what I understand by the term "practical," and as an indication also that I have not modified my views simply in order to meet criticisms, I may venture to quote from myself: "By practical I mean only regulated change in experienced values" (*Logical Conditions of a Scientific Treatment of Morality*, p. 10).

sistency of means and end in the concrete activity that we appeal to. "Try on thinking," we tell such a man, "experiment with it, taking pains sometimes to have your reasonings consistent with one another, while at other times you deliberately introduce inconsistencies; then see what you get in the two cases and how the result reached is related to your purpose in thinking." We point out that since that purpose is always to harmonise the conflicting elements of some situation through their own reorganisation, that purpose will be defeated unless the steps of reasoning are kept consistent with one another. We do not appeal from the mere consistency of the reasoning process—the intellectual aspect of the matter—to an absolute self-consistent reality; but we appeal from the material character of the end to be reached to the character of the formal procedure necessary to accomplish it.

Consider, for example, the nature of the collision, incompatibility, etc., which, according to Mr. Bradley, supplies the immediate and empirical antecedent materials over against which thought gives us the conception of a completely harmonised reality. Mr. Bradley goes so far away from intellectualism as to put the following words into the mouth of the objector, and to accept their general import: "All axioms, as a matter of fact, are practical . . . for none of them in the end can amount to more than the impulse to behave in a certain way. And they cannot express more than this impulse, together with the impossibility of satisfaction unless it is complied with" (p. 51). After accepting this (p. 152) he goes on to say: "Take for example the law of avoiding contradiction. When two elements will not remain quietly together, but collide and struggle, we cannot rest satisfied with that state. Our impulse is to alter it and, on the theoretical side, to bring the content to such shape that the variety remains peaceably in one. And this inability to rest otherwise and this tendency to alter in a certain way and direction is, *when reflected upon and made explicit*, our axiom and our intellectual standard (p. 152; italics mine).

Now as against this pragmatic statement (which, with the exception of one phrase to which I shall momentarily return, could hardly be bettered) Mr. Bradley has seemingly nothing to offer save that the intellect is "a movement of a very special kind". "Thinking is an attempt to satisfy a special impulse, and the attempt implies an assumption about reality" (p. 153). And then comes the sentence which we have quoted above to the effect that all thinking involves the assumption of the standard of consistency which is absolute for it.

Granted that intellect is a special movement or mode of practice; granted that we are not merely acting (are we ever *merely* acting?) but are "specially occupied and therefore subject to special conditions," the problem remains *what* special kind of activity is thinking? what is its experienced differentia from other kinds? what is its commerce with them? When the problem is *what* special kind of an activity is thinking and of *what* nature is the consistency which is its criterion, somehow we do not get forward by being told that thinking *is* a special mode of practice and that its criterion *is* consistency. The unquestioned presupposition of Mr. Bradley is that thinking is such a wholly separate activity (the "intellect *alone*" which has to be satisfied), that to say it has autonomy is to say that it, and its criterion, have nothing to do with other activities; that it is 'independent,' as to criterion, in a way which excludes interdependence in function and outcome. Unless the term "special" be interpreted in this sense, it is no more an answer to the contention that thinking is essentially a practical activity to say that it is a *special* mode of activity, than it would be to say that black-smithing is not an industrial activity because its end is the *special* one of making horseshoes. His underlying presupposition of the separate character of thought comes out in the passage last quoted. "Our impulse," he says, "is to alter the conflicting situation and, *on the theoretical side*, to bring its contents into peaceable unity." If one substitutes for the word "on" the word "through," one gets a conception of theory and of thinking, which does justice to the autonomy of the operation and yet so connects it with other activities as to give it a serious business, real purpose and concrete responsibility and hence testibility. From this point of view the theoretical activity is simply the form which certain practical activities take after colliding, as the most effective and fruitful way of securing their own harmonisation. The collision is not theoretical; the issue in "peaceable unity" is not theoretical. But theory names the type of activity by which the transformation from war to peace is most amply and securely effected.[1]

[1] The same point comes out in Mr. Bradley's treatment of the way in which the practical demand for the good or satisfaction is to be taken account of in a philosophical conception of the nature of reality. He admits that it comes in; but holds that this is not directly, but because if left outside it indirectly introduces a feature of "discontent" on the intellectual side (see p. 155). This, as an argument for the supremacy of the isolated theoretical standard, loses all its force if we cease

What is the use of insisting that thought takes its *logical* departure from resting back on reality as already an eternal, all-inclusive harmony, when at the same time it has to be asserted that thinking takes its *actual* departure from the fact that elements in our experience collide and struggle with each other? Suppose that instead of starting from a purely theoretical presumption we start from the experienced facts, namely, their collision and struggle. How is this to be understood? Is it something purely objective in either a physical or a logical sense? If so, who are the "we" who cannot rest satisfied with this state but endeavour to alter it? ("*We* cannot rest satisfied, *our* impulse," etc.) What has this "we" to do with the matter; how did it get implicated in a purely physical or intellectual collision? And even if it were implicated, how could it successfully interfere so as to induce peace and rest? If the collision is objective, in the physical sense, can an ego take any part in the matter? If the collision is of logical contents, is the ego also to be logically interpreted? If so, how can an extraneous logical factor interfere to any advantage? And if it is not intellectual, and the intellectual is always, logically, merely independent, how can this "we" intervene save to the undoing of the logical?

It is perhaps suggestive of caricature to suppose that the intellectualist regards the collision in question as of a physical nature—something like the eruption of Vesuvius, the explosion of a powder magazine on board ship, or the beating of hail-stones on a wheat-field. Yet the intellectualist's aversion to all change—his insistence that the temporal and transitive are not metaphysically real; his assumption that "fleeting and untrue character is perpetually forced upon our notice by the hard fact of change" (p. 460) and that "the absolute has no history of its own, for nothing perfect, nothing genuinely real can move" (pp. 499-500), seem to bear out that supposition. If such be the case, theory, of course, cannot practically intervene; it is condemned to the impotence of a merely theoretical intervention: that is, it can only proclaim the supreme reality of an Absolute Experience which we can neither experience nor employ as a criterion of specific thoughts and beliefs. It can only indulge itself in a purely metaphysical theory of what reality would be if it were totally different from what it is, consoling itself for

to conceive of the intellect as from the start an independent function, and realise that intellectual discontent *is* the practical conflict becoming deliberately aware of itself and of its purport as the most effective means of its own rectification.

its impotency with the reflection that this totally different reality is eternal and absolute.

If the collision be not objective in the physical sense, possibly it is such in the logical sense. But this alternative is open to grave difficulties. How can logical contents as such collide? Not as truths, for it is the very nature of truths to be consistent with each other; not as falsities, for recognised or detected falsities certainly do not collide, the fact that a certain thing is false being obviously consistent with the proposition that something else is true. Nor can falsities collide as unrecognised; if they did, we should from the start be aware of all errors and mistakes, instead of only in retrospect. Just as the "collisions" of physical things have significance for thought only as these things are so involved in a system of practical activities that their maladjustments mean disturbance and defeat of purpose, so theoretic collision is impossible save as the contents defined as logical lead to inconsistent and ambiguous responses. In short, on the face of the facts, the one intelligible theory about the struggles which induce theoretical activity is that they are practical; disturbances in the activities which sustain a system of values, involving disruption and instability in the experiencing of those values.[1]

Reference to the concrete situation also serves to explain the nature of the consistency in which is found the test of the validity of an idea. This consistency is the agreeing together of the exact or specific elements which in their collision with one another set the problem of thinking. As attained harmony, it is proof of the value of the idea; for it proves that the idea 'knows what it is about,' that it is 'on to its job'. It is in no way a harmony at large or *überhaupt*, a miscellaneous altogetherness, but a harmonising of just

[1] The difficulties usually brought against this view on the ground of 'science,' have their source, I think, in the following conditions: (1) The objector puts himself at the standpoint of the final results of scientific inquiry, instead of calling up cases of the stress and strain of scientific procedure still in the throes of development; (2) he overlooks the fact that every branch of science means highly specialised and refined modes of response, associated with specific types of value which the 'plain man' does not entertain; (3) he overlooks the fact that these highly refined types of reaction mean a new sensitiveness, and hence increased awareness of disturbance, of menaced organisation, where the 'plain man' is aware only of stability—in short, that problems multiply with development of scientific aim and technique; (4) he overlooks the fact that such highly specialised recognition of discrepancy on the basis of highly specialised modes of technical reaction have a final usufruct even for the plain man in making more secure, more fruitful, and, especially, more liberal and free, his responses to the ordinary things of his experience.

the elements that is needed to be brought into agreement, a harmonising through the capacity of the idea to instigate and guide a mode of behaviour calculated to complete the incomplete. Strictly speaking, it is this reorganising capacity which is the criterion of the truth of the ideas. Since, however, that faculty is demonstrated in the final harmony achieved, this last term may be fairly enough regarded as the criterion of the worth of an idea, provided we bear in mind just what we mean.

I confess to being much at a loss to realise just what the intellectualist conceives to be the relation of truth to ideas on one side and to reality on the other. My difficulty occurs, I think, because they describe and define so little in analytical detail; in writing of truth they seem rather to be under a strong emotional influence—as if they were victims of an uncritical pragmatism—which leaves much of their thought to be guessed at. The implication of their discussions assigns three distinct values to the term "truth". On the one hand, truth, is something which characterises ideas, theories, hypotheses, beliefs, judgments, propositions, assertions, etc.,—that is anything whatsoever so far as involving *intellectual* statement. From this standpoint a criterion of truth means the test of the worth of the intellectual intent, import or claim of any intellectual statement as intellectual. This is an intelligible and to me the only intelligible sense of the term truth. In the second place, it seems to be assumed that a certain kind of reality is already, prior to, apart from ideas or meanings, truth, and that it is *this* Truth or Reality which is the criterion of that lower and more unworthy kind of truth which can be possessed or aimed at by ideas. But we do not stop here. The conception that *all* truth must have a criterion haunts the intellectualist, so that the reality, which, as contrasted with ideas however valid, is taken to be The Truth (and the criterion of such truth as intellectual statements may aspire to) is treated as if it itself had to have support and warrant from some other Reality, lying back of it, which is *its* criterion. This, then, gives the third type of truth, *The Absolute Truth*. (Just why this process should not go on indefinitely is not clear, but the necessity of infinite regress may be emotionally prevented by always referring to this last type of truth as Absolute.) Now this scheme may be "true," but it is not self-explanatory nor even easily apprehensible. In just what sense, common, yet different, truth is (1) that to which ideas as ideas lay claim and yet is (2) Reality which as reality is the criterion of truth of ideas, and yet again is (3) a Reality

which completely annuls and transcends all reference to ideas, is not in the least clear to me: nor, till better informed, shall I believe it is clear to any one.

In his more strictly logical discussions, Mr. Bradley sets out from the notion that truth refers to intellectual statements and positions as such. But The Truth soon becomes a sort of transcendent essence on its own account. The identification of reality and truth on page 146 may be a mere casual phrase, but the distinction drawn between validity and absolute truth (p. 362), and the discussion of Degrees of Truth and Reality, involve assumptions of an identity of truth and reality. Truth in this sense turns out to be the criterion for the truth, the truth, that is, of ideas. But, again (p. 545), a distinction is made between "Finite Truth," that is a view of reality which would completely satisfy intelligence as such, and "Absolute Truth" which is obtained only by *passing beyond intelligence*—only when intelligence is absorbed in some Absolute in which it loses its distinctive character.

It would advance the state of discussion, I am sure, if there were more explicit statements regarding the relations of "true idea," "truth," "the criterion of truth" and "reality" to one another. A more explicit exposition also of the view that is held concerning the relation of verification and truth could hardly fail to be of value. Not infrequently the intellectualist admits that the process of verification is experimental, consisting in setting on foot various activities which express the intent of the idea and confirm or refute it according to the changes effected. This seems to mean that truth is simply the tested or verified idea as such. But then a curious reservation is introduced; the experimental process *finds*, it is said, that the idea is true, while the error of the pragmatist is to take the process by which truth is *found* as one by which it is made. The claim of 'making truth' is treated as blasphemy against the very notion of truth: such are the consequences of venturing to translate the Latin "verification" into the English "making true".

If we face the bogie thus called up, it will be found that the horror is largely sentimental. Suppose we stick to the notion that truth is a character that defines an idea so far as it is tested through the action which carries to successful completion its own intent. In this case, to make an idea true is to modify and transform it until it can stand this test: until it can initiate a mode of response which in its issue realises its claim to be the intention and the method of harmonising the discrepancies of a given situation. The idea is remade by constant acting upon its meaning, and by

introducing into its content such characters as are indicated by any resulting failures to secure harmony. From this point of view verification and truth are two names for the same thing. We call it "verification" when we regard it as process; when the development of the idea is strung out and exposed to view in all that makes it true. We call it "truth" when we take it as product, as process telescoped and condensed.

Suppose the idea to be an invention, say of the telephone. In this case, is not the verification of the idea as it stood in some one's head and the construction of the device which carries out its intent one and the same? In this case, does the truth of the idea mean anything else than that the issue proves the idea can be carried into effect? There are certain intellectualists who are not of the absolutist type; who do not believe that all men's aims, designs, projects, which have to do with action, whether industrial, social or moral in scope, have been from all eternity registered as already accomplished in reality. How do such persons dispose of this problem of the truth of practical ideas?

Is not the truth of such ideas wholly an affair of *making* them true by constructing, through appropriate behaviour, the condition of affairs which satisfies the requirement of the idea? If, in this case, truth means the effective capacity of the idea 'to make good,' what is there in the logic of the case to forbid the application of analogous considerations to any idea?

I hear a noise in the street. It suggests as its meaning a street-car. To test this idea I go to the window and through listening and looking intently—the listening and the looking being modes of behaviour—organise into a single situation previously disconnected, yet *hypothetically* connected, elements of existence and meaning. In this way an idea is made true; that which was proposition or hypothesis is no longer merely a propounding or a guess. If I had not reacted in a way appropriate to the idea it would have remained a mere idea; at most a candidate for truth which, unless acted upon upon the spot, would have always remained a theory. Now in such a case—where the end to be accomplished is the discovery of a certain order of facts—would the intellectualist claim that apart from the forming and entertaining of some idea, the category of truth has either existence or meaning? Will he claim that without an original practical uneasiness introducing a practical aim of inquiry there must have been, whether or no, an idea? Must the world for some purely intellectual reason be intel-

lectually viewed and characterised in every conceivable respect from every conceivable point of view? Could not that occurrence which I now identify as a noisy street-car have so far as pure intelligence is concerned retained its unidentified status of being mere physical alteration in a vast unidentified complex of matter-in-motion? Was there any intellectual ground which compelled it to be identified as just this definite thing—namely, a noisy street-car? If so, why should it not also have to be characterised in countless millions of other ways; for example, as to its distance from some crater in the moon, or its effect upon the circulation of my blood, or upon my irascible neighbour's temper, or its bearing upon the Monroe Doctrine? In short, do not intellectual positions and statements mean a new and significant fact in the development of reality?

Excepting then where the situation itself suggests some aim or intent beyond itself as existence, is there ever an idea? Is it just existence as existence which determines the further presence of ideas, or is it the occurrence and maintenance of an end transcending the already existent? And even if it be supposed that all existences in all their inconceivable complexity *have* to mirror themselves in ideas, what is truth? Is it reality apart from its ideational version? If so, what has truth to do with ideas and ideas with truth? Or if it is a property of ideas in relation to reality, is it their property so far as mirroring? Or does it belong to them with respect to changes they intend introducing into reality? Is not truth something to be achieved by an idea and something which can be achieved only through an activity which is neither a part of reality already existent nor a part of the idea conceived merely as intellectual?

It is perhaps dangerous to attempt to follow the inner workings of the processes by which truth is first identified with some superior type of Reality, and then this Truth is taken as the criterion of the truth of ideas; while all the time it is held that truth is something already possessed by ideas as purely intellectual. But there seems to be some ground for believing that this identification is due to a twofold confusion, one having to do with idea, and the other with reality. As to the first point: After an idea is made true, we naturally say, in retrospect, 'it *was* true all the time'. Now this truism is quite innocuous as a truism, being just a restatement of the fact that the idea has, as matter of fact, worked successfully. But it may be regarded not as a truism but as furnishing some additional knowledge, as if it were, indeed, the dawning of a revelation regarding

truth. Then it is said that the idea worked or was verified because it was already inherently, just as idea, the truth, the pragmatist, so it is said, making the error of supposing that it is true because it works. If one remembers that what the experimentalist means is that the effective working of an idea and its truth are one and the same thing—this working being neither the cause nor the evidence of truth but its nature—it is hard to see the point of this statement. A man under peculiarly precarious circumstances has been rescued from drowning. A by-stander remarks that now he is a saved man. "Yes," replies some one, "but he was a saved man all the time, and the process of rescuing, while it gives evidence of that fact, does not constitute it." Now even such a statement, as pure tautology, as characterising the entire process in terms of its issue, is objectionable only in the fact that, like all tautology, it seems to say something but does not. But if it were regarded as revealing the earlier condition of affairs, apart from the active process by which it was carried to a happy conclusion, such interpretation would be monstrously false; and would declare its falsity in the fact that, acted upon, the man would have been left to drown. In like fashion, to say, *after the event*, that a given idea was true all the time, is to lose sight of what makes an idea an idea, its hypothetical character; and thereby deliberately to transform it into brute dogma—something to which no canon of verification can ever be applied. The intellectualist almost always treats the pragmatic account as if it were, from the standpoint of the pragmatist as well as from his own, a denial of the reality of truth, while it is nothing but a statement of its nature. When the intellectualist realises this, he will, I hope, ask himself: What then on the pragmatic basis is meant by the proposition that an idea is true all the time? If the statement that an idea was true all the time has no meaning except that the idea was one which as matter of fact succeeded through action in achieving its intent, mere reiteration that the idea was true all the time or it would not have succeeded, does not take us far. The conception may be false, but it cannot be refuted by manipulation of phraseology.[1]

[1] Such a statement as, for example, Mr. Bradley's (MIND, vol. xiii., No. 51, N.S., p. 3, article on Truth and Practice) "The idea works . . . but is able to work because I have chosen the right idea" surely loses any argumentative force it may seem to have, when it is recalled that, upon the theory argued against, ability to work and rightness are one and the same thing. If the wording is changed to read "The idea is able to work because I have chosen an idea which is able to work" the question-begging character of the implied criterion is evident. The change of

Such tautology is the argument by which the intellectualist persuades himself that truth is a character of ideas just as ideas—apart from the practical necessity they are under to issue in behaviour. On the other hand, there is the argument by which *reality* is identified with truth; so that on the principle that two things which are equal to the same thing are equal to each other, truth as idea and truth as reality are taken to be one and the same thing. Wherever there is an improved or tested idea, an idea which has made good, there is a concrete reality in the way of a completed or harmonised situation. The same activity which proves the idea constructs an inherently satisfied situation out of an inherently dissentient one,—for it is precisely the capacity of the idea as an aim and method of action to determine this transformation which is the criterion of its truth. Now unless all the elements in the situation are held steadily in view, the specific way in which the harmonised reality affords the criterion of truth (namely, through its function of being the last term of a process of active determination) is lost from sight; and the achieved reality in its merely existent character, apart from its practical or fulfilment character, is treated as The Truth. But when the reality is thus separated from the process by which it is achieved, when it is taken just as given, it is neither truth nor a criterion of truth. It is a state of facts like any other. The achieved telephone is a criterion of the validity of a certain prior idea in so far as it is the fulfilment of activities which set forth the nature of that idea, but just as telephone, as a machine actually in existence, it is no more truth nor criterion of truth than is a crack in the wall or a cobble-stone on the street.

The intervening term that mediates and completes the confusion of truth with ideas on one hand and reality on the other, is, I think, the fact that ideas after they have been tested in action are employed in the development and grounding of further ideas. There are cases in which an idea ceases to exist as idea as soon as it is made true; this is so as matter of fact and it is impossible to conceive any reason why it should not be so in point of theory. Such is the case, I take it, with a large part—possibly the major portion—of the ideas which mediate the smaller and transient crises of daily practice. I cannot imagine the situation in which the truth to which I have referred above—the verification of a

phraseology also may suggest the crucial and pregnant question: How does any one know that an idea is able to work excepting by setting it at work?

certain idea about a certain noise—would ever function again as truth—save as I have given it this function in this paper by using it as a corroboration of the truth of a certain theory. Such ideas mostly cease, giving way to a matter-of-fact status: say, the perception of the noisy street-car. One at the time may say "My idea regarding that noise was a true idea"; or one may not even go so far as that, he may just stop with the eventual perception. But the tested idea need never recur as a factor of proof in any other problem. Such, however, is conspicuously not the case with our scientific ideas. In its first value, the idea or hypothesis of gravitation entertained by Newton, stood, when verified, on exactly the same level as the hypothesis regarding the noise in the street. Theoretically, that case might have been so isolated that its truth character would disappear from thought as soon as a certain factual condition was ascertained. But practically quite the opposite has happened. The idea operates in many other inquiries, and operates no longer as mere idea, but *as* proved idea. Such truths get an "eternal" status—one irrespective of application just now and here, because there are so many nows and heres in which they are useful. Just as to say an idea was true all the time is a way of saying *in retrospect* that it has come out in a certain fashion, so to say that an idea is "eternally true" is to indicate *prospective* modes of application which are indefinitely anticipated. Its meaning, therefore is strictly pragmatic. It does not indicate a property inherent in the idea as intellectualised existence, but denotes a property of use and employment.

I have gone from the very general considerations which occupied us in the earlier portions of this article to matters which relatively at least are specific, and which to some will doubtless seem irrelevant or trivial. I conclude then with a summary in the hope that it may bind together the earlier and the later parts of this paper.

1. The condition which antecedes and provokes any particular exercise of reflective knowing is always one of discrepancies, struggle, "collision". This condition is practical, for it involves the habits and interests of the organism, an agent. This does not mean that the struggle is merely personal, nor subjective, nor psychological. The agent or individual is one factor in the situation—not the situation something subsisting in the individual. The individual has to be identified in the situation, before any situation can be referred—as in psychology—to the individual. But the discrepancy calls out and controls reflective knowing only as the fortunes of an agent are implicated in the crisis.

Certain elements stand out as obstacles, as interferences, as deficiencies—in short as unsatisfactory and as requiring something for their completion. Other elements stand out as wanted—as required, as a satisfaction which does not exist. This clash, an accompaniment of all desire, between the given and the wanted, between the present and the absent, is at once the root and the type of that peculiar paradoxical relation between existence and meaning which Bradley insists upon as the essence of judgment. Taken on its own merits it is not irrational—a proof that we are dealing with mere appearance not with genuine reality; but it is non-rational—an evidence that we are dealing with a practical reality.

2. The intellectual or reflective and logical is a *statement* of this conflict: an attempt to describe and define it. It is, as it were, the practical clash held off at arm's length for inspection and investigation. In this way brute blind reaction against the unsatisfactoriness of the situation is suspended. It is turned into the channel of observing, of inferring, of reasoning, or defining means and end. It is this change in the quality of activity, from directly overt, to indirect, or inquiring with view to stating, which constitutes the *specific* nature of reflective practice to which Mr. Bradley calls attention. The discovery of the nature of the conflict supplies materials for the fact or existence side of the judgment. The conception or projection of the nature of the object in which the conflict would be terminated furnishes the material for the meaning side of the judgment. It is ideal because anticipatory, just as the subject side is existential, because reminiscent or recording. Hence the two are necessarily both distinguished from and yet referred to each other: only through location of a problem can a solution be conceived; only in reference to the intent of finding a solution can the elements of the problem be selected and interpreted. In origin and in destiny, this correlative determination of existence and meaning is tentative and experimental. The aim of the subject of the judgment is not to include all possible reality, but to select those elements of reality which are useful in locating the source and nature of the difficulty in hand. The aim of the predicate is not to bunch all possible meaning and refer it in one final act indiscriminately to all existence, but to state the standpoint and method from which the difficulty of the particular situation may most effectively be dealt with. The selection of what is relevant to the characterisation of the problem and the projection of the method of dealing with it are theoretic,

hypothetic, intellectual:—that is, they are tentative ways of viewing the matter for the sake of guiding, economising and freeing the activities through which it may *really* be dealt with.

3. The criterion of the worth of the idea is thus the capacity of the idea (as a definition of the end or outcome sought in a way likely to be serviceable as a method) to operate in fulfilling the object for the sake of which it was projected. Capacity of operation in this fashion is the test, measure, or criterion of truth. Hence the criterion is practical in the most overt sense of that term. We may, if we choose, regard the reality in which the idea terminates through its use in guiding action, as the criterion; but if we do so choose, it is at our peril that we forget that this reality serves as criterion in its capacity of fulfilment of plan through relevant response, and not as sheer objectively present reality.

4. Difficulties overlap; problems recur which resemble each other in the kind of resource they seem to demand for solution. Various modes of activity with their respective ends, going on at some time more or less independently, get organised into single comprehensive systems of behaviour. The solution of one problem is found to create difficulties elsewhere; or the truth which is made in the solution of one problem is found to afford an effective method of dealing with questions arising apparently from unallied sources. Thus certain tested ideas in performing a constant or recurrent function secure a certain permanent status. The prospective use of such truths, the satisfaction which we anticipate in their employ, the assurance of control which we feel in their possession, becomes relatively much more important than the circumstances under which they were first made true. In becoming permanent resources, such tested ideas get a generalised energy of position. They are truths in general, truths "in themselves" or in the abstract, truths to which positive value is assigned on their own account. Such truths are the "eternal truths" of current discussion. They naturally and properly add to their intellectual and to their practical worth a certain æsthetic quality. They are interesting to contemplate, and their contemplation arouses emotions of admiration and reverence. To make these emotions the basis of assigning peculiar inherent sanctity to them, apart from their warrant in use, is simply to give way to that mood which in primitive man is the cause of attributing magical efficacy to physical things. Æsthetically such truths are more than instrumentalities. But to ignore both the instrumental and the æsthetic

aspect, and to ascribe values which are due to an instrumental and æsthetic character, to some interior and *a priori* constitution of truth is to make fetishes of them.

We must not exaggerate the permanence and stability of such truths with respect to their recurring and prospective use. It is only relatively speaking that they are unchanging. When applied to new cases, as resources for coping with new difficulties, the oldest of truths are to some extent remade. Indeed it is only through such application and such remaking that truths retain their freshness and vitality. Otherwise they are relegated to faint reminiscences of an antique tradition. Even the truth that two and two make four has gained a new meaning, has had its truth in some degree remade, in the development of the modern theory of number. If we put ourselves in the attitude of a scientific inquirer in asking what is the meaning of truth *per se*, there spring up before us those ideas which are actively employed in the mastery of new fields, in the organisation of new materials. This is the essential difference between truth and dogma; between the living and the dead and decaying. Above all, it is in the region of moral truth that this stands out. Moral truths which are not recreated in application to the urgencies of the passing hour, no matter how true in the place and time of their origin, are pernicious and misleading, *i.e.*, false. And it is perhaps through emphasising this fact, embodied in one form or another in every system of morals and in every religion of moral import, that one most readily realises the real character of truth.

II.—THE NATURE OF INCOMPATIBILITY.

By Leslie J. Walker.

The Ontological Argument for the existence of God as stated by Leibnitz, differs in an important respect from all previous statements of it: it is based upon the nature of incompatibility. 'We have the idea of God,' Anselm had said, 'as a Being comprising in Himself all perfections; therefore, since existence is a perfection and without it God would not comprise all perfections, He must exist.' 'This our idea of God as comprising in Himself all perfections, is *clear and distinct*,' said Descartes, 'hence, since clearness and distinctness is the criterion of objective validity, God exists.' The conclusiveness of these arguments as they stood Leibnitz denied, while at the same time readily granting that he had an idea of God such as his predecessors had described, and also that this idea, *if not self-contradictory*, must be objectively valid, since it included as one of its notes 'necessary existence'. He urged, however, that an essential step in the argument had been omitted. His illustrious predecessors had neglected to prove that the attributes of God were *compatible*. If God is possible, He certainly exists; but is He possible? "The Ontological Argument is not a paralogism, but an imperfect demonstration, which presupposes something that it is still necessary to prove to give the argument mathematical evidence; namely, it is tacitly supposed that this idea of the all-great and all-perfect Being is possible, and implies no contradiction."[1]

This presupposition Leibnitz set himself to prove. He begins by defining what he understands by a Being who has all perfections *simpliciter*, and then gives his proof of the compatibility of all simple and positive perfections. "I call a *perfection* every simple quality that is positive and absolute and expresses without any limits whatever it does express. Now, since such a quality is simple, it is also irresolvable or

[1] *The Philosophy of Leibnitz*, Russell, p. 286 (G v., 419).

indefinable, for otherwise it will either not be one simple quality, but an aggregate of several, or, if it is one, it will be circumscribed by limits and will therefore be conceived by a negation of further progress, contrary to the hypothesis, for it is assumed to be purely positive. Hence it is not difficult to show that all perfections are compatible *inter se*, or can be in the same subject. For let there be such a proposition as

A and B are incompatible

(understanding by A and B two such simple forms or perfections—the same holds if several are assumed at once), it is obvious that it cannot be proved without a resolution of one or both of the terms A and B; for otherwise their nature would not enter into the reasoning, and the incompatibility of any other things could be shown just as well as theirs. But by hypothesis they are irresolvable. Therefore this proposition cannot be proved concerning them."[1]

Thus incompatibility, according to Leibnitz, holds only between positive and negative terms (between A and not-A), or between a positive idea (A) and some complex idea involving the negation of the first (B resolvable into B′ and not-A). For we have no immediate and necessary judgment of incompatibility, or, as Leibnitz puts it, 'the incompatibility of A and B is not true *per se*,' and consequently can be shown only by a process of reasoning. This reasoning, however, cannot be synthetic, since the synthesis of two or more ideas will not reveal their incompatibility unless they have first been analysed; hence, it must be analytic. But simple ideas cannot be analysed, and so 'cannot enter into the reasoning'. All simple and positive ideas, therefore, must be compatible.

This proof of the compatibility of all simple perfections is based upon the theory that incompatibility can always be reduced to contradiction. Mr. Russell, on the other hand, while conceding that positive and negative ideas are necessarily incompatible, thinks that there may also be incompatibility between positive ideas. "Thus a self-contradictory idea, if it be not a mere negative, such as a non-existent existent, must always involve a synthetic relation of incompatibility between two simple notions. The impossible idea in Leibnitz's sense, presupposes the idea which is impossible on account of some synthetic proposition; and conversely, the possible complex idea is possible on account of a synthetic proposition asserting the compatibility of its simple constituents."[2]

[1] *The Philosophy of Leibnitz*, Russell, p. 287 (G vii., 261).
[2] *Ibid.*, p. 21.

In Mr. Russell's opinion, therefore, simple ideas are not always compatible or 'reconcilable among themselves'. Consequently the legitimacy of their combination in complex ideas will depend upon 'synthetic relations of compatibility and incompatibility'. Thus in definition there is always presupposed "the synthetic proposition that the simple constituents are compatible"; while, on the other hand, but for "synthetic relations of incompatibility no negative proposition would occur".[1] With neither of these statements can I agree. It seems to me that there is no such thing as a relation of incompatibility between simple ideas, and that negation presupposes, not incompatibility, but limitation. And one way of establishing this opinion in regard to the nature of simple ideas will be to remove all foundation for these synthetic relations of incompatibility, by showing that *all incompatibility can be reduced to contradiction*, and this is the thesis which I shall endeavour to prove.

The points, therefore, which I wish to make, are as follows: (1) That of *compatibility* we have immediate knowledge through the analysis of the various complex wholes presented to consciousness; (2) that negation presupposes individual objects which differ from one another, and that the negative judgment is primarily our way of expressing the fact that a quality belonging to one object does not *de facto* belong to another; (3) that belief in *positive incompatibility* is based upon repeated experiences of qualities which never coexist in the same object, and is thus at first empirical in nature; (4) but that an examination of these qualities which *de facto* are never found together in the same object, reveals the further fact that they are mutually contradictory and so *necessarily incompatible*.

In the first place, then, the function of the intellect is to apprehend the nature of reality—to reproduce in the individual consciousness more or less completely and more or less adequately the universe of which it is a part. The human intellect, however, is incapable of apprehending in a single act the universe as a whole. It has perforce to build up its knowledge, beginning with the individual. The individual is itself complex, indeed; but at first it is presented as a whole, a unity, a 'thing'. By outline, movement, unity of action, we easily distinguish it from the background, and gradually by comparing it with other things we learn to analyse it into its qualities or attributes. "Not only must each object present itself to us integrally before it shells off

[1] *The Philosophy of Leibnitz*, Russell, pp. 20, 21 *passim*.

into its qualities, but the whole scene around us must disengage for us object after object from its still background by emergence and change; and even our self-detachment from the world over against us must wait for the start of collision between the force we issue and that we receive. To confine ourselves to the simplest case: when a red ivory ball, seen for the first time, has been withdrawn, it will leave a mental representation of itself, in which all that it simultaneously gave us will indistinguishably coexist. Let a white ball succeed to it; now, and not before, will an attribute detach itself, and the colour by force of contrast, be shaken into the foreground."[1]

Thus, by analysis, we learn that different qualities do *in fact* belong to the same object, and from this may legitimately infer—what is already implicitly recognised—that they *can* belong to the same object, or, in other words, that they are compatible. *A posse ad esse valet illatio.* Knowledge of *com*patibility thus presupposes nothing beyond the mental analysis of a concrete whole into its differentiating parts or qualities.[2]

Our knowledge of incompatibility stands on a different footing. Inference from the actual to the possible is valid *a fortiori;* but we cannot infer that what is not actual is impossible. And incompatibility is the impossibility of co-existence in the same object. Hence the mere absence of co-existence is strictly no proof of incompatibility.

Before discussing, however, the nature of that incompatibility which we believe to hold between certain positive qualities, it will be well to treat of the incompatibility of contradictories, since this in our theory is the fundamental form of incompatibility. Our belief in the incompatibility of contradictories is expressed in the Principle of Contradiction. How, therefore, and when, we may ask, does belief in this principle arise? Is it due to an immediate and necessary judgment? Or is it—like the ordinary man's belief in the incompatibility of positive qualities—based merely upon experience?

Let us return for a moment to Dr. Martineau's example of the white and red balls. Suppose that these balls are placed before us side by side, or, better still, that they are moving slowly in opposite directions. We shall now distinguish not merely two colours, but two objects, the one white and the other red. Suppose, further, that some one removes the balls,

[1] Martineau, *Essays Phil. and Theol.*, vol. i., p. 271-2.

[2] *Cf.* F. H. Bradley, *Appearance and Reality*, p. 569. "As a fact and given we have in feeling diversity and unity in one whole."

and then places one in our hand without letting us see it. Something perhaps suggests that it is the white one, and prompts us to form the judgment: 'This is the white object'. But, when we look, we find that it is the red one that has been given to us. Another judgment will now take the place of the one at first suggested, and we shall say, 'This is *not* the white object, but the red one'.

In some way such as this, and at a very early stage in the child's mental development, I conceive that the negative judgment arises. The negative judgment is essentially one in which a suggested predicate is rejected.[1] It is doubtless true, as Mr. Bradley says, that in negation the idea denied "in every case qualifies an alternative more or less distinct; and hence nowhere floats absolutely".[2] For instance, if we assert that 'a square circle does not exist,' 'existence' is certainly a possible predicate of reality; and so is 'possibility' if we change the form of our proposition and say that 'a square circle is impossible'. But the essential characteristic of the negative judgment is its rejection of a suggested predicate. And this rejection is possible only because objects are limited, and have not the predicates which are suggested as belonging to them.

The negative judgment, moreover, always involves an implicit recognition of the Principle of Contradiction. Negation would be meaningless if this were not the case. When we say 'This object is not white' we imply that the corresponding affirmative must be false. The law that contradictories are incompatible is essential to the intelligent use of negation. Thus even a child, when it forms a negative judgment, may be said implicitly to recognise the validity of this fundamental principle of thought. For, though the child would probably not understand an explicit formulation, since this would presuppose considerable development in its powers of abstraction, yet it can hardly be said *in no sense* to understand a principle which it actually uses and without which its judgments would be meaningless.

Whether, then, we say that 'the same thing cannot at the same time be and not be', or that 'affirmation and denial are

[1] Plato's statement in the 'Sophistes' that, when we speak of not-being, "we speak not of something opposed to being, but only different" would seem to identify negation with 'otherness'. And it is true in one sense that "the not-beautiful is the contrast of *being* with *being*," since the not-beautiful has a positive implication. But the primary and essential meaning of the not-beautiful is the negation of beauty. Negation may involve otherness, but the two ideas are not identical.

[2] F. H. Bradley, 'On Floating Ideas and the Imaginary,' MIND, N.S., 60, p. 449.

incompatible,' the law of thought thus formulated has all the marks of a self-evident truth. In either form it compels our assent; it is involved in one of the fundamental forms of thought—the negative judgment, and unless it were valid thought would be impossible; also its contradictory is inconceivable. Moreover, apart altogether from the question as to whether origin affects validity, in as much as the Principle of Contradiction is involved, and in fact used, in the very first negative judgment that we make—and even this judgment must mean something—it would hardly seem to be the result of experiment, as Mr. Schiller asserts, or of experience, as Mr. Husik would put it. Indeed, both the Pragmatist and Empirical account of its origin appear to me to be due to an *ignoratio elenchi*. Mr. Schiller tells us that "the Principle of Contradiction may be taken as simply the negative side of that of Identity;"[1] and the Principle of Identity is understood by him to affirm "the persistence of Identity through change";[2] so that the Pragmatist formulation of the Principle of Contradiction must be somewhat as follows: "A thing must be capable of excluding whatever threatens (the persistence of) its identity (through change)".[3] But this is certainly not the Principle which we claim as an axiom or self-evident truth. The axiomatic and traditional Principle of Contradiction says nothing at all about persistence or change. It restricts itself to one and the same moment of time. It is quite probable that belief in the persistence of objects through change *is* due to experience and experiment, but this belief is a very different thing from our belief that an object cannot at the same time and in the same sense be and not be.

Nor is Mr. Husik's attack on the axiomatic nature of the Principle any more to the point. For, convinced that it is learnt by experience, he prefers to enunciate it in his own way, *viz.*: "A thing cannot have at the same time what experience finds it cannot have at the same time".[4] To the principle as thus enunciated, I am disposed to object in the first place, that experience alone is incapable of finding what an object can or cannot have at the same time. Experience, in the sense in which Mr. Husik appears to be using the word, can tell us what things *do* or *do not* have at the same time, but questions as to possibility or impossibility are of a higher order than mere experience. In the second place, granted that *belief* in incompatibility does arise whenever two or more

[1] 'Axioms as Postulates,' *Personal Idealism*, p. 106.
[2] *Ibid.*, p. 98. [3] *Ibid.*, p. 106.
[4] 'Aristotle and the Principle of Contradiction,' MIND, N.S., 58, p. 215.

qualities are found never to co-exist, yet this incompatibility is between positive qualities, while the Principle of Contradiction asserts incompatibility between affirmation and denial, or between the positive idea 'being' and its corresponding negative 'not-being'. A certain amount of experience is doubtless wanted before we recognise that white objects cannot at the same time be red; but we recognise that the statement 'This is not X' means precisely the opposite of the statement 'This is X' and the consequent incompatibility of the two statements, contemporaneously with the first intelligent use of negation.

The principle of contradiction is based, therefore, on the nature of affirmation and denial, and would thus seem to belong primarily to the logical order. But this does not make it merely subjective, for it is also based upon certain facts of the objective order. Negation itself presupposes that objects are limited, one having or being what another has not or is not; for, otherwise, there would be nothing to deny. Negation, in fact, would be impossible unless (1) there were relatively independent objects (or at least qualities), each having a certain determinate nature of its own; and unless (2) these objects differed from one another; and (3) it were possible to get to know their respective natures. Since then the principle of contradiction presupposes Negation, it presupposes indirectly these objective facts, and so is capable of an objective or ontological interpretation. Yet, though the statement that 'the same thing cannot at same time be and not be' has meaning, it is really only the objectification of the principle that it is impossible intelligently to affirm and at the same time to deny. Such terms as 'not-being,' 'nothing,' 'unreal,' 'impossible,' are not true concepts; for, in abstraction from their positive correlatives, they have no meaning. They signify merely the negation of the corresponding positive terms objectified. It is only in exceptional cases that we use them as subjects of intelligible propositions, and when used as predicates, they constitute in reality a negative judgment.

It will be interesting, if we may digress for a moment from the problem before us, to compare the principle of Contradiction with the so-called Principle of Identity. As traditionally enunciated, the Principle of Identity states that 'Whatever is, is'. But how this enunciation is to be defended against the charge of tautology—if taken, as the words naturally imply, in the objective sense—I have never been able to see. Moreover, as this Principle claims to be a Law of Thought, it should, as a '*Law*,' state a relation

between *different* things, and, as a '*Law of Thought*,' be expressed in logical terms. If, on the other hand, we interpret the principle to mean that 'Everything has a determinate nature,' or, that there is such a thing as 'Identity in Difference,"[1] this again is hardly a law of thought; nor is it any longer the complement of the Principle of Contradiction, as it purports to be; for the latter is a necessary law, or a law stating a necessary connection between things, whereas the Principle of Identity, if such be its meaning, is merely 'positive'. Again, if we say that "it is possible to make judgments that have a meaning and are true,"[2] though we have now a statement about a process of thought, yet, again, the law, so stated, is little more than descriptive, and seems to belong to the psychological, rather than to the logical order; for, unlike the Principle of Contradiction and all other logical laws, it has no normative application as a guiding principle of cognitive operations. It seems to me, therefore, that the Principle of Identity has no claim to be regarded as a logical principle at all, nor indeed as a law in the same sense that the Principle of Contradiction is a law, unless we take it merely as another way of expressing the Principle of Contradiction itself, *viz.*, that what objectively is, cannot be treated in thought as if it were not.

So far we have discussed only one kind of necessary incompatibility, that which holds between affirmation and denial. But there are other kinds. Many *positive* qualities never co-exist in the same object; and repeated experience of this fact generates in us the belief they are incompatible. Is this incompatibility a mere fact, or is it a necessity? Must we, in the case of these positive qualities, be content with mere empirical knowledge, or can we go further and attempt to explain their apparent incompatibility? Contradiction undoubtedly involves incompatibility; is it equally true to say that incompatibility involves contradiction?

That incompatibility *does* involve contradiction, and is therefore a necessity and not a mere fact is what we have to prove, if we are to establish Leibnitz' assertion that simple ideas are never incompatible; for his *a priori* proof, as it stands, is hardly convincing. And I think that it can be proved, for it can be shown in many cases that of incompatible qualities one is implicitly the negation of the others, and hence of necessity cannot belong to the same object.

Aristotle treats incompatibility under the name of 'Opposition,' and it will be convenient, in further discussing its

[1] Bosanquet, *Logic*, vol. ii., p. 208. [2] *Ibid.*, p. 207.

nature, to use his classification. "Things are said to be opposed to one another in four ways; as Relatives, as Contraries, as Privation and Possession, and as Affirmation and Denial. For example, the double and the half are opposed as Relatives; bad and good as Contraries; blindness and sight as Privation and Possession; 'He is sitting' and 'He is not sitting' as Affirmation and Denial."[1]

The opposition which exists between Affirmation and Denial is expressed in the Principle of Contradiction, and of this we have already treated. It may, as we have seen, and as Aristotle himself points out, be taken in an objective as well as in a purely logical sense. Not only is 'He is sitting' opposed to 'He is not sitting,' but the objects to which the predicates 'sitting' and 'not-sitting' refer, are also opposed.[2]

Of the four kinds of Opposition, we are told in the Metaphysics that Contradiction is the 'first'—a term which from the context evidently means the most fundamental, or that on which the other forms are based.[3] The passage is thus commented on by Aquinas: "Of these four kinds of opposition the first is contradiction. And the reason is this, that contradiction is involved in all the others as something more fundamental (*prius*) and more simple. For it is impossible that opposites of any kind should exist together in the same object, and this is due to the fact that one opposite by its very nature implies the negation of the other."[4]

That the second kind of opposition can be reduced to the first requires little proof. "For privation means either the complete incapacity to possess (a certain attribute), or the non-possession of an attribute which a thing is naturally fitted to possess, the one being complete privation, the other privation that is in some way limited."[5] In fact, privation in general is defined as 'negatio in aliquo subjecto'. Wherefore the opposition of privation and possession is, as Aristotle says, a kind of contradiction.

The reduction of contraries to contradiction, on the other

[1] *λέγεται δὲ ἕτερον ἑτέρῳ ἀντικεῖσθαι τετραχῶς, ἢ ὡς τὰ πρός τι, ἢ ὡς τὰ ἐναντία, ἢ ὡς στέρησις καὶ ἕξις, ἢ ὡς κατάφασις καὶ ἀπόφασις.* Aristotle, *Categories*, c. 10.

[2] *ὡς γάρ ποτε ἡ κατάφασις πρὸς τὴν ἀπόφασιν ἀντίκειται, οἷον τὸ κάθηται τῷ οὐ κάθηται, οὕτω καὶ τὸ ὑφ' ἑκάτερον πρᾶγμα ἀντίκειται, τὸ καθῆσθαι τῷ μὴ καθῆσθαι. Ibid.*

[3] *τούτων δὲ πρῶτον ἀντίφασις. Arist. Metaph.* (Leipsic edition, lib. ix. (x.), c. 4, p. 200). Compare *πρώτη δὲ ἐναντίωσις ἕξις καὶ στέρησις* (*ibid.*), where again *πρώτη* is used in the sense of the most fundamental, or that from which all other forms are derived.

[4] *Commentaria in Arist. Metaph.*, lib. x., lect. 6.

[5] *Metaph.*, lib. ix. (x.), c. 4, pp. 200, 201.

hand, is by no means so simple a matter, since contraries admit of a mean, whereas contradiction does not. The difficulty is, however, only apparent and will admit a satisfactory explanation. In the first place, it is always possible to find some larger class to which a given pair of contraries belongs. Contraries, in other words, are of the same genus, and in it they are 'maxime distantia' (πλεῖστον διαφέρειν). "For, since things that differ may differ to a greater or less extent, there will always be a greatest difference and this I call Contrariety."[1] Contraries thus constitute the two extreme differentiæ of a given genus, between which there may be many 'means'.[2]

In the second place, the differentiæ of a genus may be regarded as giving fuller meaning or fuller reality to the genus which they differentiate, inasmuch as they enlarge or perfect the generic notion by the addition of other notes. One of the extreme differentiæ or contraries will thus give to the genus its highest or final perfection; for instance, the genus animal reaches its highest perfection in the human organism. Taking, then, this perfection as an *ideal* standard, we may arrange the other differentiæ in a scale according to the degree in which they approach this ideal.[3] We shall thus have a maximum and a minimum, the maximum being the ideal perfection itself, and the minimum the limiting case where there is a natural aptitude in regard to the perfection in question, but no proximate disposition or approach towards its realisation. These maxima and minima are the contraries, and are said to constitute the first differences of the genus, because we may consider the 'means' as arising from their combination in various proportions.

Hence, we may regard a differentia in two ways, either as a specific difference which gives a certain determination or form to the genus and so constitutes the species; or as a mere stage in a process which has for its end the realisation of a certain ideal perfection. It is in this second sense that the extreme differentiæ are contrary to one another. For "the contrariety existing between the differentiæ of a genus

[1] There is one exception: 'corruptible' and 'incorruptible' are contraries, but do not fall under any of the 'summa genera' or categories mentioned by Aristotle. They are said 'per se dividere ens'; and so, like the categories themselves, they are not predicable univocally of ens. That they are mutually contradictory, however, is evident from their form. *Cf. Metaph.* ix. (x.), c. 10.

[2] *Ibid.*, c. 4.

[3] This 'ideal' perfection according to Aristotle and Aquinas seems to have been regarded as the greatest *actual* perfection, so that for him contraries constitute the greatest *actual* difference.

is considered according to the common principle upon which contrariety is based, namely, excellence and defect[1]. Thus contrariety involves *intensive quantity*. And this applies not only to the extremes but also to the 'means'. In fact, any pair of differentiæ may be regarded as contraries relative to those differentiæ which lie between them. Every differentia, then, has a certain intensive quantity which will depend upon the degree in which it realises the ideal perfection of the maxima differentia. And it is on account of this intensive quantity that the incompatibility of positive qualities arises.

Here for the third time, therefore, we come across that fundamental characteristic of individual objects which we found to be presupposed by the possibility of negation and of contradiction, *viz.*, limitation. This limitation may be either qualitative or quantitative; but in a sense all limitation involves quantity. An object may be limited in that it has certain qualities whereas others are absent, and it may also be limited in that it has these qualities only in a certain degree; both of which cases imply quantity, though in a different way. Moreover, our knowledge of objects includes the knowledge of their limitations. We do not study things in isolation; we compare them; and so learn that their qualities are limited both in number and degree; and this limitation is implied in the definition which we may give of them.

Thus all definition has a negative as well as a positive aspect. We mean by a man, a cow, a newspaper, a triangle, objects having (1) certain qualities, and not others; and (2) a certain degree of these qualities, and no more. Now, either an object has a certain quality or it has not. If, then, by calling it a cow we affirm certain qualities of it, and by calling it a horse we implicitly deny them, we have contradicted ourselves. Again, either an object has or it has not a certain determinate degree of some perfection. If, then, red implies one degree of this perfection and blue another, red and blue are mutually contradictory and for this reason incompatible; since by predicating one degree of a perfection we implicitly deny any other. It is only between contraries as contraries that there is a mean, in as much as it is possible that an object may have neither the maximum nor the minimum of the quality in question. But, in so far as it has a certain degree of that quality, it cannot have at the same time any other degree. In other words, when we have determined the degree of perfection which an object has in the genus to

[1] Aquinas, *Comment. in Arist. Physics.* lib. v., lect. 3.

which it belongs, to assign to it any other differentia of that same genus would involve contradiction. The same thing can belong to one species only. Hence, all the differentiæ of a genus are necessarily incompatible, and this incompatibility is based on the Principle of Contradiction.

It remains to confirm this law by a few examples before passing on to a brief consideration of the fourth kind of incompatibility, that between relatives. Positive incompatibility is found to hold chiefly between the sensible qualities of objects. Hot and cold, hard and soft, rough and smooth, we infer from sense-experience to be incompatible. Each of these pairs of opposites, moreover, belongs to the same genus, and between them there are means, so that they are contraries. Thus, temperature, hardness, and roughness, vary in intensive quantity and admit of degree. Again, temperature is due to molecular movements varying in length; hardness to resistance varying in intensity; roughness and smoothness to the spatial arrangement of the resisting points, which may be at a greater or less distance from one another on a given surface. Hence the incompatibility of different degrees of heat and coldness, roughness and smoothness, hardness and softness, respectively, is explained by the fact that each pair of contraries and the means lying between them involve different intensive quantities of the same fundamental property or quality. Thus, their incompatibility is based upon contradiction; and this conclusion, inferred first of all from perceptual data, is confirmed by our knowledge of the objective nature of the qualities perceived.

The incompatibility of tastes and odours would seem to be due to a similar cause; for we find contrast, compensation and degree in sweetness, saltness, acidity, bitterness, as well as in various smells. As, however, there is no satisfactory classification in smells, and even in taste it is impossible as yet to arrange the four primary taste-qualities in pairs so as to form a scale, the incompatibility which they evince cannot actually be reduced to contradiction; though from the data above-mentioned, the inference as to the nature of their incompatibility is at least probable.

In treating of colours we are on surer ground. In spite of the fact that introspective data present many difficulties, and have given rise to several different theories, yet even our present knowledge, imperfect as it is, affords a striking confirmation of the theory we have been advancing. In the first place, there are complementary colours and their mixtures, giving us graduated series; red through white to green, yellow through white to blue, white through grey to black.

Then there is the spectrum, where the positive colour qualities arrange themselves in a scale according to their refractive indices. Finally, there is the undulatory theory of light, which reduces colours to different rates of vibration and different lengths of ether waves, as in the case of heat. All this is so much evidence pointing to the conclusion that different colours are but different intensive quantities of some fundamental quality or mode of motion. True, the subjective data and the physical theory are not yet completely co-ordinated, but both show at any rate this, that colour involves quantity or degree—a fact which in itself is sufficient to prove that contradiction is the basis of the incompatibility of colours.

I might add indefinitely to the examples I have chosen, for if contraries are the first specific differences of a genus, there will be as many pairs of contraries as there are genera, and in each case the incompatibility of two or more attributes will result. But the principle involved and the method of reducing the incompatibility to contradiction will be the same. Let us proceed, then, to consider relative opposition.

"Things which are relatively opposed are said to be what they are on account of their being opposites, or on account of their being in some way different from one another";[1] in other words, it is precisely on account of the relation holding between them that they get their respective names. Thus, a man is said to be a 'father' in reference to something other than himself, and on account of a certain relation other than that of identity, holding between himself and that other thing, his 'son'. The same may be said of the correlative 'son,' and similarly for other pairs of relatives, *e.g.*, the 'double' and the 'half.' Since, then, "things that are relatively opposed are said to be what they are in reference to other things, or on account of their relation to other things,"[2] the incompatibility of relatives is only a special case of the incompatibility of relations in general.

How does this incompatibility of relations arise? Things are said to be related in virtue of their attributes; thus, one book is 'like' another in virtue of its colour, or its binding, and 'smaller' than another in virtue of its extensive quantity or size. These attributes, moreover, on account of which the relation is predicated, are not considered in isolation, but in comparison with an attribute of some other thing. A relation

[1] ὅσα μὲν οὖν ὡς τὰ πρός τι ἀντίκειται, αὐτὰ ἅπερ ἐστὶ τῶν ἀντικειμένων λέγεται ἢ ὁπωσοῦν ἄλλως πρὸς αὐτά, οἷον τὸ διπλάσιον, αὐτὸ ὅπερ ἐστίν, ἑτέρου διπλάσιον λέγεται· τινὸς γὰρ διπλάσιον. Arist., *Categ.*, c. 10.

[2] ὅσα οὖν ἀντίκειται ὡς τὰ πρός τι, αὐτὰ ἅπερ ἐστὶν ἑτέρων λέγεται ἢ ὁπωσδήποτε πρὸς ἄλληλα λέγεται. *Ibid.*

is essentially a *πρός τι σχέσις*, a reference of one thing to another, and the relation is predicated or said to exist in virtue of certain attributes belonging respectively to the two things. The attributes on account of which the relation is predicated are, therefore, essential to the relation. Change either of them and you change the relation, which depends for its existence upon their being what they are. And conversely for a new relation to be predicable or for a given relation to change, the terms must change.

Let us suppose now, that two different relations are predicated as holding simultaneously between two objects. If the attributes in virtue of which these relations are predicated, and in virtue of which they differ, are incompatible, the relations also will be incompatible. Incompatibility of relations thus arises from incompatibility of attributes. But the incompatibility of attributes is due, as we have seen, to some kind of quantitive incompatibility, and so is reducible to contradiction. Hence the incompatibility of relations and of relatives is also reducible to contradiction.

Thus, for material things to occupy different places, or to be of different sizes and shapes at the same time, is impossible, because in each case extrinsic or intrinsic space-relations are involved ; and space-relations imply quantity, since they imply that given points in the object in question are at certain definite distances from an indefinite number of other points within or without the object, distance being measured by extensive quantity. Again, to say that 'A is the father of B,' and at the same time 'the son of B,' is implicitly a contradiction, as may be shown in several ways. For instance, both A and B are individuals occupying a determinate place in the time-series and in the natural order. This time-series may be represented by a line, part of which corresponds to the life of A and part to the life of B ; the line, moreover, being such that, at any point X, it will be divided into two parts, antecedents and non-antecedents (or consequents). Now, the assertion that 'A is the father of B,' fixes the point X, and determines A (in virtue of part of his life at any rate) as an antecedent, and B as not an antecedent, and, in this sense, the opposite or contradictory of A ; and the statement that 'B is the father of A,' or 'A the son of B,' would reverse the respective positions of A and B in this time-series. B would now be an antecedent, and A not an antecedent ; which is evidently a contradiction of what was involved in the previous statement that 'A was the father of B'.

We have now discussed under the four headings suggested by Aristotle, the various kinds of incompatibility of which

we have experience. Two of these, affirmation and denial, possession and privation, are obviously contradictory in nature. Our belief in the other two, the incompatibility of contraries and of their means, and of relatives, on the other hand, is based primarily on the fact that such attributes and relations never co-exist. And though from non-co-existence we cannot legitimately infer incompatibility, it would appear, nevertheless, that this quasi-instinctive belief of mankind is not fallacious. For, while positive qualities, and the relations which depend upon them, are not incompatible in so far as they are positive, yet, since they are limited both in number and degree, and limitation always has a negative implication, this incompatibility does of necessity arise. Incompatibility thus involves and can be reduced to contradiction.

The theory of incompatibility upon which Leibnitz bases his Ontological Argument would, therefore, seem to be valid. Between positive qualities as such, incompatibility cannot exist. Positive and simple attributes, unless they are "circumscribed by limits," and so in a sense negative as well as positive, are always compatible. "Ea quae non sunt opposita, possunt simul existere in eodem."[1]

But, having granted the validity of this theory, are we forced to accept the Ontological Argument itself as valid? Whatever our ultimate decision may be, there are several objections which demand consideration. I shall deal with them under three heads. In the first place, it is often said that the Ontological Argument involves an illicit transition from the ideal to the actual order; secondly, it may be objected that existence is not a predicate; and, thirdly, it may be urged that we have all along been dealing with 'created' perfections, and that we cannot infer from the compatibility of these to the compatibility of the attributes of God—and this is the only objection which seems to me to be of any real force.

1. In regard to the alleged illicit transition from the ideal to the actual, it would seem that although in general 'a posse ad esse non valet illatio,' this dictum does not apply to the case of God. If we define God as the 'Necessary Being,' there can be no question of an illicit transition: for the concept of what is possible (*can* be), and at the same time is necessary (*cannot not* be) must be objectively valid, otherwise the concept would be contradictory. But, suppose we define God as an Infinite Being, or a Being who comprises in Himself all simple perfections in an infinite degree, is the infer-

[1] Aquinas, *Comment. in Metaph.*, lib. x., lect. 10.

ence 'a posse ad esse' equally valid? Does Infinity imply Necessary Existence? Leibnitz speaks of God indifferently as an Infinite Being and as a Necessary Being; and the two terms are really equivalents. For an Infinite Being cannot receive His existence from anything else, since His infinity excludes the possibility of anything else existing independently of Him. In other words, whatever else exists must be wholly dependent upon Him for its existence, and so cannot give Him existence. An Infinite Being, therefore, must exist '*a se*,' of itself; that is, its existence must proceed from itself and be necessarily involved in its other attributes, which are such that it cannot not exist. Hence, if God is possible, He exists. But, in proving the possibility of God, we must not forget that the existence which we predicate of Him, is Necessary Existence or Self-sufficiency, and the possibility of *this* must be shown. The question as to how far we have proved the possibility of God in this sense, I shall discuss under the third objection.

2. Mr. Russell admits that on the analytic theory of necessary judgments, Leibnitz' argument proves that God, as defined by Leibnitz, is possible. But he objects to the Ontological Argument itself, which is involved in saying that, since existence is a perfection, God exists. "This," he says, "depends upon regarding existence as a predicate, which Leibnitz does," . . . whereas "he ought to have arrived at Kant's position that existence is not a predicate, and that God's non-existence cannot be self-contradictory."[1]

Personally I must admit that the Kantian argument regarding existence as a predicate does not convince me. I see no objection to admitting that "a hundred thalers which I merely imagine," are *not* "exactly like a hundred thalers which really exist". For, to predicate existence of them, though it does not change their *essential* nature, yet makes a real difference in the idea which I form of them. 'Existence' has meaning. 'Existing things' are not the same as 'things in the abstract'; they have a power of affecting me and my consciousness in a way which is impossible to things that do not exist. Consequently the addition of the idea of 'existence' to the idea of 'thalers' gives the latter a meaning which they had not before. My idea of 'existing thalers' and my idea of 'thalers in the abstract' are not exactly alike.

3. Since, then, existence has meaning, and since we do not actually predicate it intelligently, I am disposed to admit

[1] *The Philosophy of Leibnitz*, Russell, p. 174-5.

that it *is* a predicate. But, on the other hand, existence, when predicated of God, is predicated in a different way to that in which it is predicated of anything else. Of God, we predicate 'Necessary Existence,' while of other things we predicate only 'contingent existence'. And the two kinds of existence, or the two ways of predicating existence are only analogous; *i.e.*, we cannot in the strict sense of the words make existence a genus of which 'necessary' and 'contingent' are the differentiæ.

Now, all that our argument as to the nature of Incompatibility has proved, is that '*contingent existence*' is compatible with simple attributes such as we know them *in rerum natura*: or, granting that it is possible to regard existence in abstraction from its necessity or its contingency—that '*existence in the abstract*' is compatible with such attributes. But this is insufficient for the purpose of the Ontological Argument. God is essentially a Necessary Being, and upon this depends the validity of the major: 'If God is possible, He exists'. Hence, to prove that God is possible, we must show how existence is implied in His other attributes, or—to put the same thing in another way—we must prove that Necessary Existence is compatible with these attributes: for it makes all the difference to the validity of our argument whether the existence we predicate is necessary or not.

This our theory of incompatibility certainly does not prove. Moreover, another difficulty of a similar kind suggests itself. We have been dealing throughout with beings that are both contingent and limited, and have shown that, when *their* attributes are incompatible, they involve contradiction; and hence we have inferred that simple and positive attributes as such cannot be incompatible. But are the simple qualities which we have examined, at all comparable with the attributes of God? At best the comparison is only that of analogy. And though the proof may hold in regard to all simple natures as such, and although simple natures as such are not limited in degree, yet the analogy weakens the argument when it is applied to attributes predicated of God.[1] Again, the attributes with which we have been dealing are of

[1] The assertion of analogy does not mean that there is no similarity between contingent perfections and the attributes of God, or that the former are not truly manifestations of the latter. But the attributes of God are not separable in kind; they are all involved in His Deity; so that contingent perfections, such as goodness and wisdom, are not predicable of God in the same sense that they are predicable of creatures, but only in an analogous sense. Yet it is nevertheless true that "by an accumulation of such analogous predications we approximate towards the ever unattainable comprehension of Deity".

the physical order, and, even granting that we may legitimately infer the nature of incompatibility, so demonstrated, to be universal, yet it will be by no means an easy task to show that moral attributes, such, for instance, as Justice and Mercy, are not mutually contradictory. And further, granted that Justice *is* the truest Mercy, and that other moral attributes are similarly compatible, we have still to show that the predication of these attributes is not a contradiction of the Unity of God. How is the synthesis of all these attributes in one Being possible? We cannot say. The theory of Incompatibility that we have been advocating, does little more than show that the compatibility of God's attributes cannot be disproved. It is sufficient merely to throw the *onus probandi* on an opponent.

Thus Leibnitz' view of the nature of incompatibility does not seem to complete the Ontological Argument. It supplies an obvious deficiency, but there is still something further required, a step in the process of reasoning which has not yet been proved, and which it would seem to be impossible to prove without infringing upon the province of other arguments. At the same time it will be admitted, I think, that the famous proof of the Existence of God, when supported by this theory of Incompatibility, if not conclusive, is at least a strong presumptive argument well deserving attention and having distinct religious value as a motive to belief. We cannot, indeed, show *a priori* any necessary connection between God's attributes, yet the fact that even among contingent existents, their "qualities are not, as in Bacon's view, put together as ingredients are inserted to constitute a dish, but are different aspects of one and the same central arrangement,"[1] would seem to point to a necessary connexion and to mutual implication.

There are also other versions of the Ontological Argument besides that of Anselm, Descartes, and Leibnitz. Nicholas de Cusa, for instance, urges that, unless the concept we form of Infinite Being is objectively valid, all knowledge and all science is meaningless. For, "all things seek the same which is something absolute". The modern argument based on the ideals of which we are conscious and on the need which we feel of their ultimate satisfaction, is similar. Expressed in this form as a postulate for which we seek verification, the argument has much more force, especially in the philosophical atmosphere of the present day; for, unless these ideals are realised somewhere, our nature and needs are without meaning and without purpose.

[1] Venn, *Empirical Logic*, p. 82.

To these and indeed to all proofs of the existence of God, this theory of Incompatibility is, I take it, of value. For, to many minds, the suspicion that the simple and infinite attributes under which God is conceived may be incompatible, suggests that our conception of Him, so far from being real, is impossible; and that hence, all arguments advanced to prove His existence are worthless; while the synthetic theory advocated by Mr. Russell, contains an implicit difficulty in regard to the Unity of God; since, if I have understood Him aright, it involves a fundamental Duality, two systems of being or beings specifically and essentially incompatible, and of which there cannot possibly be a single common Ground. If, on the other hand, we grant that incompatibility is due to contradiction, and that contradiction presupposes negation, and negation objects limited in nature, objections against attributes that are not limited in nature but infinite, cannot be urged on the ground of any incompatibility, such as *we* can conceive. This view is, I think, in harmony with that of modern Hegelians, though I have considered it from the Realist rather than from the Idealist standpoint. Mr. Bradley tells us that there are 'no native contraries' or incompatibles. "Things are contrary (incompatible) when, being diverse, they strive to be united in one point which in itself does not admit of internal diversity."[1] He adds, however, that "conjunction and contradiction in short is but our defect, our one-sidedness, and our abstraction, and it is appearance and not Reality". Here I must beg to differ. Of the nature of conjunction and Compatibility, of the problem as to *how* different qualities can belong to the same object, I have said nothing; but, in my view, though there are no native incompatibles, yet incompatibility and contradiction are both founded in Reality, *viz.*, in the reality of limited objects, dependent on God, but relatively independent of one another.

[1] Bradley, *Appearance and Reality*, p. 572.

III.—THE SUBCONSCIOUS FACTORS OF MENTAL PROCESS CONSIDERED IN RELATION TO THOUGHT (II.).[1]

By A. M. Bodkin.

13. We may now pass to speak of the more complex forms of the reflective consciousness, especially of the inferential connexion as recognised by thought; and shall consider this in relation to the subconscious organisation of sense-material, and the influence exerted by factors below the thought-level. It will be necessary to consider somewhat fully the essential character of inference just as we analysed that of judgment in order to discriminate clearly what is involved in the lifting of subconscious factors to these higher levels of consciousness. In perception the mind is constantly forming judgments which appear as simple and immediate, mere assertions of what is given in sense: *e.g.*, judgments of position and form, recognition of physical objects. Psychological analysis readily shows that the determinants of such judgments are complex, consisting of different sensational elements, each with its acquired influence upon organic, including cerebral, activity.

Interesting as it undoubtedly is to trace within sentient processes forms parallel with those of the higher self-conscious intellect, yet there seems some danger of confusion in applying the name of inference, or reasoning, to such experiences as those considered. By inference it is perhaps better to understand exclusively a form of thought or judgment which has attained to a certain degree of complexity; namely, to the recognition of a distinction and a special relation among the contents which it asserts of reality. Not merely the unconscious extension of a datum in accordance with past experience, but some conscious distinction of datum and result, or ground and consequent, with apprehension of their connexion is to be regarded as essential to inference.[2] Thus

[1] Continued from No. 62, p. 228.

[2] *Cf.* Stout, *Analytic Psychology*, vol. ii., p. 71; and Bosanquet, *Logic*, bk. ii., ch. i.

in respect of perception we may inquire, Are the sensations experienced actually regarded by the percipient as the sign of a predicated content which goes beyond them? With the majority of our perceptual judgments this appears not to be the case. Predication is immediate, the sensations received are not thought of at all in distinction from their enlargement and interpretation. There is, however, a process of reflective perception which may be rightly regarded as inference, in which we proceed to interpret a given appearance, as it were tentatively, distinguishing our datum from our interpretation and regarding the former as the ground of the latter. In this case if the given sensations cannot be further characterised, but are simply brought under the idea of a sign, *i.e.*, thought of as compelling to a certain predication, we may be said to have inference whose grounds are subconscious. For example, we hear a sound and interpret it doubtfully as the sound of a particular bell, or catch a glimpse of a retreating figure and 'think we recognise' a friend; but seek in vain to justify our judgment by singling out the characteristic peculiarity in the clang of the bell or in the appearance of the pedestrian that operates in suggesting and maintaining the complete idea of the individual object. There is an inferential judgment we may fairly say, since we assert mediately of Reality, interposing as a link the fact of our sensational experience, but we are unable to fill out and perfect this link or middle term of inference by assigning to it a definite character. As in the case of the interrogative attitude that may precede the simple judgment of identification, considered above, we have a form of thought applied into which the matter of perception is hardly yet to be compelled.

Sensational elements are mingled with elements mentally supplied, and form with these a complex product, which is however dealt with by thought, identified, related, named, only as a whole. Judgments thus complexly determined, or even organic adaptations taking place apart from judgment, have sometimes been spoken of as unconscious inferences, on the ground of the underlying resemblance which analysis exhibits between these and processes of undoubted inference. In both cases, as Dr. Binet says,[1] the mind passes beyond actual experience by suggestion; the present is supplemented and dealt with in accordance with past experience. The same point is urged by Mr. Spencer when he refers to the number of attributes not given in sense which are implicitly

[1] *Psychology of Reasoning*, ch. iii.

asserted in recognition, or in the application of a name, and speaks of these as inferred, "represented in an act of reason".[1]

14. It is important to consider how largely the apprehension of the conditional or inferential relation is probably dependent upon social activities and especially upon the use of language. We need not perhaps go so far as to deny that any form of such apprehension could be attained by a solitary mind in its dealings with Nature. Throughout animal life, however little socially organised, we can doubtless observe, as Stout has said, the practical operation of the Category of Causality.[2] The animal learns to adapt its conduct to certain connexions in Nature. It acquires habits of acceptance or rejection of certain means according to their proved efficacy; and in the feelings of elation, confidence, disappointment, hesitancy which probably attend its efforts, we may venture to recognise the analogue of such apprehension as we possess of the causal or conditional relation. When, however, we pass beyond causality as a category of immediate perception and action to consider it in the form in which it is presented to our thought, we find that the reference to universal experience is a most essential element within it. In the recognition of causation certain conditions are thought as entailing a certain consequence whenever and wherever found, and the extended Reality of which the relation is thus predicated is fundamentally a social construction. The order which we recognise within it, the connexions which bind together its parts, are objective at least in the sense of being, as Lotze says, the same for all thinking beings and independent of them (*Logic*, § 3). No doubt this does not express the entire character of such connexions as the mind recognises to be objectively real. If we distinguish, as Lotze does, between the truly causal relation and the mere logical coherence which may serve to guide us in inference,[3] then we are probably justified in claiming for the former as the mind apprehends it something more than the mere validity, the possibility of agreement among thinkers in other times and places, which seems all that is implied in the latter. Of the idea of causation the germ and central point must probably be looked for as Dr. Ward urges[4] in the mind's feeling of its own activity. Such activity as the mind experiences in itself when physical changes follow felt impulse, is unreflectively attributed to things in their relation

[1] *Psychology*, § 310.
[2] Stout, *Manual*, bk. iii., div. ii., ch. i. [3] *Logic*, § 62.
[4] Article "Psychology," *Encyclopædia Britannica*, 9th ed., vol. xx., p. 82.

to one another. In this way a fuller reality is apprehended as pertaining to the causal nexus than could be constituted by the mere fact of agreement among different thinkers. Nevertheless as the organisation of experience proceeds, and the conditional or inferential relation is extended beyond those cases where immediate analogy with human action can be felt by the clearer-sighted intelligence, it would appear that the importance of social recognition as the test of objective connexion must be ever increasing. The great need for men in their common labours is to find signs fit to be generally trusted, laws of the sequence of phenomena on which all alike may depend in the regulation of their undertakings.

Prof. Royce has urged this view concerning the apprehension of causal connexion. The conception as we now possess it bears the marks, he maintains, of its social origin. The explanation of the physical world is, and has always been, a social affair. It was in the progress of such social undertakings as commerce and industrial art that men learned to define and to describe in exact terms processes and products, and to view them as "subject to law precisely in so far as they are also matters of tradition, of agreement, of social community".[1]

If we turn from historical to what we know of individual development within a modern community we find an even more obvious importance attaching to social influences in the attainment of the idea of causal connexion. The child learns what relations hold in Reality for him only in learning what holds also for others. Imitating their actions and guided by their utterances he both verifies the fact that their truth is true for him and finds out what that truth is. He uses his individual experience "mainly to decipher and verify the ready-made scheme of knowledge that is given . . . *en bloc* with the words of [the] mother-tongue".[2] So soon as he begins to feel himself in any sense a discoverer he feels the need of imposing his discoveries upon others and of finding his truths confirmed by them.[3]

15. It is by taking account of the social character of man's knowledge in its whole structure and development that we best realise the importance of language for thought. Only as the individual mind is enabled through language "to transcend its own limits and share the minds of others"[4]

[1] MIND, vol. vi., p. 382.
[2] Croom Robertson, *Philosophical Remains*, p. 68.
[3] *Cf.* Baldwin, *Social Interpretations*, bk. i., ch. iii., § ii., 'The Child's Inventions'.
[4] Dr. Ward's article 'Psychology,' p. 75.

does it become possible for a true system of knowledge to be constructed—a system which, when once it begins to be realised in however fragmentary a form, the individual may apply to the thoughtful guidance of his activities, and which, in applying, he may further thoughtfully extend and elaborate.

It has already been considered, in an earlier part of the present discussion, how the " given " becomes an object of " clear consciousness " in judgment by being brought under an idea fixed by a name, thus receiving a place within the system of common knowledge. Such a ' qualitative ' or descriptive judgment does not, however, in itself represent a typically complete act of thought. It must be conceived as normally made for the sake of some further consequence—some value which it will have in the guidance of action, immediate or remote. The problem has also been touched upon of the psychological character of action as proceeding apart from the supervision of thought. Such action presents us with a fundamental type of mental process, more primitive and wider-reaching than the type with which we make acquaintance in considering the structure of judgment. The sensory stimulus setting in motion mental tendencies, acquired through past individual experience or inherited—tendencies which are unconceived, unreflected upon, but accompanied by possibly vivid feeling—gives us the type of mental process throughout the wide ranges of life where we have no reason to suppose thought and knowledge proper to exist. In inference, which may be regarded as the complete act of thought, we find united both these types already discussed. There is reference of an immediate experience to the conceptual system and again, this act of reference, like the process of instinctive action, is of the nature of a practical response, subservient to the ends of life and feeling. It is for the sake of these ends that the social experience stored through the help of language in the form of communicable principles is brought to bear upon the particular presentation. The concept with which the mind meets the new presentation is a centre of relations, a meeting point of various ideal links that bind it to other elements within the common system of knowledge. With all these relations the particular experience is potentially invested when once brought under its appropriate name or concept, while the special interest of the moment will determine which of them shall be brought out in prominent realisation. We have considered how in the acquisition of practical skill consequences come to be attached, as it were by the organism, to certain experiences which need be neither named nor conceived; but for the mind that has

attained to conception and language it becomes possible to attach consequences which the individual organism could never in its private dealing with nature have learnt—to apply principles of connexion established and tested far beyond the range of any single experience. Thus, thought or reasoning may be looked upon as the distinctive mode by which the socialised intellect in possession of organised systems of knowledge "adapts itself to its environment," plans and directs reaction. It is the performance upon a higher level of the same function performed 'subconsciously' by the animal intelligence when movement is prompted or modified by feeling. Of explicit deductive reasoning—the application of universal principles to particular experience—we see the analogue at the level of feeling in the arousing and bringing into action of instinctive tendencies, while in the gradual establishment and modification of such tendencies by sense-experience we see the process corresponding to the 'inductive' movement of thought in which particular experiences are brought to bear upon some portion of the common knowledge, establishing, modifying or suggesting.

16. This then we recognise as the character of explicit inference: the definite bringing of the particular experience into touch with general knowledge embodied in universal principles fixed by language: the whole being for the sake of some practical end or purpose in dealing with concrete Reality. But it is our special design at the present to consider those processes which lie intermediate between simple sentience, or feeling as unstirred by thought, and the process of thought in its clear explicit form. Of such partially subconscious acts of inference we frequently have experience. A proposition is put forward which we recognise as a conclusion, feeling that it both requires, and is capable of, justification according to commonly accepted principles, or by means of assignable experiences such as might be socially verified; and yet we may be quite unable at the time to indicate such justifying grounds. Reference has been already made to the case in which an inference of this kind whose grounds remain obscure for thought arises from a simple perceptive judgment, where doubt or conflict intervenes. It is, however, only in rather special cases when the possibility of illusion is brought home to the mind that perceptual judgment is felt to require justification. More typical examples of inference with subconscious grounds are found where the predicate assigned is manifestly not given in the sense-experience of the moment, and frequently the subject to which the predicate is referred is constructed by the aid of memory rather than perceived

within the present, as in inference concerning the behaviour of some individual object, or the issue of some complex event. The mind may be carried on to predicate in such cases without either memory of similar instances or any clear selection of the points within the total content that go to justify the application of the predicate. At the same time the process is raised to the plane of inference by the very fact that the proposition put forward is contemplated in the light of a conclusion. The feelings which impel the mind to assert are taken as representing certain socially valid connexions which require only to be disentangled and lifted from their obscurity. The psychical mechanism through which such inferential judgments are brought about is plainly similar to that of unreflective bodily reaction. A presented content awakens tendencies which have been formed by the movements of attention in the past. A system of connexions which may be said to be within the mind, rather than presented as an object to it, is stirred at the first apprehension of the case—the question or problem on which judgment is required—and judgment takes shape before the mind in accordance with these connexions which, still, while they operate remain dark to reflexion.

For examples one may refer to such familiar instances as those brought forward by Mill in his *Logic*. The judge of practical good sense who is trusted to form decisions but not to justify them, the general who gives orders for the arrangement of his troops from a glance at the outlines of the ground without a single theorem in his mind respecting the relation between ground and array, these show us the operation of mental tendencies acquired by experience which are capable of being appropriately adapted even to new combinations of circumstances, while yet their possessor is unable to translate them into speech, or to lay them out before his mind in reflective apprehension. The general characters connected are felt only as entangled amid the particular setting of the concrete experience.

In order, however, that justification should be presented for judgment these operative connexions have to be dragged into the foreground of consciousness, or if this cannot be at first achieved, yet the mind, armed with the idea of inferential connexion in that form which social education has made familiar, searches amongst the circumstances of the case as they are felt in the total, searches among the faint suggestions of past similar experience, striving thus to make explicit something of the felt necessity by which it is silently urged and determined.

17. Historically it appears that the most primitive form of reasoning, or presenting justification for judgment, is by analogy (*cf.* James, *Psychology*, p. 363). A similar particular case known to speaker and hearer is set forth; the actual ground of inference is not analysed out, but the hearer is assisted by the analogy to perform the transition of mind already performed by the first thinker; and for both a beginning is made toward detaching the universal connexion, or operative principle within the inference, from the irrelevant details with which in the single instance it is encumbered. In all cases where mental action is as yet modified only to a relatively slight degree by language it would seem to be necessarily by an appeal to analogy—to a similar particular instance—that assertion or anticipation must be justified. When analytic thought begins first to penetrate some sphere of hitherto unreflective practice it is through comparison of concrete cases that it proceeds. The connexion first apprehended only in a total concrete way is purified, and comes to be separately conceived, through conflict of the differing characters within the special cases observed, which thus become recognised as variant instances of an identical relation (*cf.* Stout, *Analytic Psychology*, ch. ix., § 3). When, however, we consider the process of making explicit subconscious grounds of inference, as these exist for thinkers in a developed community and within provinces of subject-matter where thought is from the first organised under social influences, practised and established through participation in language, we do not always find the same necessity for a primary appeal to the particular. The tendency followed out by the individual in unreflective predication may have been acquired, not in the course of his own dealings with nature, but in intercourse with his fellows. Principles shaped by universal experience and fixed by language may have been communicated to the individual and afterwards forgotten, while yet leaving their effect upon his mind in the shape of a tendency or disposition. Statements and arguments assentingly thought after another may for their chief result contribute toward producing a "set" of the intellectual organism—a tendency to approve, or reject, or form judgment upon new occasions, in accordance with the formerly accepted principles, which the mind finds itself at the same time unable to reproduce. In such a case as this the effect of closer analysis and self-interrogation during the effort to justify assertion might naturally be to recover in its general form the principle previously presented, rather than to revive any concrete parallel case. Such parallels might indeed come later if justification for

the asserted principle were further demanded, since in concrete experience the justification of inference must of course be ultimately found. But in these instances, which would seem to be frequent among minds educated through language, the primary appeal in passing behind immediate judgment is to a general principle as socially established—a connexion already lifted from the medium of concrete experience, and marked out as a link by which the thoughtful mind may pass from datum to conclusion.

18. So far, for the sake of simplicity, we have spoken of inferential justification as taking place by means of a single principle. In most cases, however, where the need of justification is felt, the determining grounds of the conclusions are too numerous and subtle to be capable of indication by a single principle. A single reason given is usually fit to stand only as a first effort or first instalment of argument, a mere indication of the direction along which proof is to be looked for. Yet even the formulation of a single principle will seem sometimes to strengthen immensely the mind's hold upon its position. Such gain and reinforcement appears to come about through the felt influence of language in its function of socialising the individual thought, or of restoring it to that social plane whence its originating materials first came to the individual. The word forms selected, with the manifold suggestiveness that clings about them from their use in other contexts and by other persons, react upon the thought whose yet inarticulate pressure urged their choice. Implications not in view before are brought to consciousness by a sort of return wave from the effort of reflective speech. The thought seems to acquire a kind of independent existence and power of development in the objective world into which it has been launched.

Where thought is comparatively feeble the effect of the first attempt at expression is apt to be a premature satisfaction. The unspoken elements of meaning are lost, as it were, in the glare of the thought expressed ; while at the same time there is no delicate distinction of the exact sense of the words and forms used, so that the thinker is over-readily persuaded that he has put forth an adequate justification or account of his position. The entire force of his assurance of the conclusion, or asserted fact, is discharged upon the logically insufficient propositions employed in its expression and defence. It is largely through the clash of different minds in argument—through conflict and the vexation of misunderstanding—that the thinker gains firmer practical grasp of the distinction between the thing actually said (*i.e.*

normally conveyed by his speech) and the deeper felt meaning that lies behind the speech. The sense of words becomes realised with increasing delicacy, especially through study of the more accurately expressed thoughts of literature: and gradually it comes about that not only in public argument but also in the silent framing of private thought the thinker distinguishes between what he has made clear—what he has put from him as an object capable of presentation to others as to self—and the remainder not yet objectified and organised within his mind. This need for a social expression even of private thought is made clearer when we reflect that the "intellectual conscience" of the individual to the test of which in private reflexion he brings the products of his thought, is, like the moral conscience, shaped and disciplined by social influences. Its verdict is given in favour of such reasonings as appear best fitted to secure social approval of the kind which the individual's education has taught him to value. Just as in moral self-judgment we may seem to hear the voice of an ideal spectator—a "man within the breast" —pronouncing upon even our secret acts, so in the silent elaboration of thought the demands of an ideal critic—an intellectual *socius* to whom the mind makes "secret reference" [1] must be satisfied by the arguments which we project.

If, under criticism, the first attempt at justification gives way or appears inadequate while yet the thinker has faith in the conclusion which he set out to defend and in the grounds which he feels himself to possess for it, the necessity arises for closer specification and analysis. The various relevant features within the case as it presents itself to the mind have to be disentangled and the threads of connexion by which they lead to the conclusion to be set forth as general principles. The original process of analysis has to be more accurately performed and repeated upon its own results, the argument so treated being usually found to involve "rather a cluster of generalisations than a single major premiss"; [2] so that while each inferential unit is perhaps weak in itself, yet together, drawing strength from their combination within the whole, they may amount to a sufficient (practical or probable) proof of the thing asserted.

19. How is such a process of analysis to be regarded psychologically? Is it possible to maintain with psychological accuracy that in the course of it grounds are made explicit which were formerly subconsciously present as felt factors

[1] *Cf.* Locke, *Essay Concerning Human Understanding*, bk. iii., ch. ii., § iv.

[2] A. Sidgwick, *Use of Words in Reasoning*, p. 84.

within the mind, or, must we regard the process simply as the emergence into consciousness of contents which were beforehand conditioned by the acquired constitution of the brain but unrepresented by any felt feature within the conscious state? This is a question of similar nature to that discussed earlier in the present essay; but at that point reference was made chiefly to the process of analysing out and identifying elements of sensation within a total state. Now we are extending the question to elements which need not be given in sense, nor within any presentation of concrete imagery, but which yet appear to be in some way influential factors in mental operation prior to their reflective discernment. Before proceeding further it seems desirable to offer an illustration, although in dealing with a process so complex in its nature and capable of specification in such varying forms any illustration is apt to appear inadequate and largely irrelevant. Nevertheless the following may serve. In an essay on problems of city life a discussion appears as to the hopes to be entertained from the work of the several principal religious bodies among the crowded population of the poorer districts of London. Which of these bodies, it is questioned, is most fitted to cope with the special difficulties of the situation. A person confronted by such a question, assuming him to have had a certain amount of experience relevant to the subject—an experience extended and directed doubtless by reading and conversation—might very probably arrive first at a conclusion which would suggest itself more or less confidently to his mind, partly according to the extent of his relevant knowledge, though perhaps still more according to his habits, intellectual and emotional. Then suppose him to undertake the reflective justification of his decision—to analyse what he knows of the spirit and organisation of each of the religious bodies in question, also of the temper and habits of the population whose welfare is in view. Thus, thinking out the subject, he arrives at the formulation of an explicit argument in which he seems to himself to have set forth some at least of the grounds which determined the attitude that on hearing the question he originally took up. How are we to conceive of the nature of these determining grounds prior to their becoming explicit? Such a case as that here suggested would appear to be included by Dr. Stout under the head of the analysis of unconscious psychical dispositions,[1] since he observes that we have an instance of such analysis "whenever we examine . . . what we know about any given

[1] *Analytic Psychology*, bk. i., ch. ii., § 4.

point". In the analysis of a psychical disposition, it is said, the differences which emerge do not correspond to a pre-existing experience. The process is thus contrasted with discrimination as carried on in the sphere of sense-perception; in the latter an actual experience is analysed, in the former it would seem that prior to the analysis there exists only a possibility of experience corresponding to a modification of the brain substance. To the present writer it appears that the process of the analysis of the grounds of inferential judgment cannot be adequately described merely by reference to the pre-existence of unconscious cerebral conditions.

Undoubtedly there are at any given time brain-modifications which serve as conditions or "permanent possibilities" of future presentations without having themselves any immediate effect upon consciousness, or of whose influence, if this is argued for on other grounds,[1] introspection at least can give not the slightest hint. But in the case of the reflective justification of a swiftly formed inferential judgment the grounds which we bring to light and formulate as premisses have not the appearance of emerging as wholly new factors into consciousness, abruptly, as a memory will seem sometimes to break upon us from the void. Rather the process of discrimination is felt as one of continuous development of a content already present. Just as after the analysis of a sensational experience the newly separated factors may be discerned to correspond to felt peculiarities of the unanalysed state when this is recalled in memory, so with the analysis of inferential judgment. There is a felt complexity at the first —a complex ground or source of necessity apprehended obscurely as a whole when the judgment is made—and when the separate threads of evidence have been disentangled and drawn out in language they may be apprehended (as it seems) to correspond to elements which within the prior unanalysed state went to constitute its peculiar felt nature and quality.

It is true that in many cases where reflective justification is attempted its result is not of this kind. Facts and principles may be brought from the stores of memory during reflexion which the mind had never denied but which it simply ignored in springing to its first conclusion. Thus the original judgment, instead of being justified in its spirit and intention, may be modified or reversed. Such a case brings out in contrast to the other a process which really appears as no more than the excitation of an unconscious disposition. The forgotten truths were of course represented in the structure of the

[1] For metaphysical treatment *cf.* Leibniz.

brain or they could not have been recalled, but they were inoperative and unfelt in the conscious act of the preceding moment. Again, another variant case, intermediate between those referred to, occurs when the mind in passing judgment is obscurely aware of elements "in the background" whose influence tells against the attitude adopted. Such factors though they be inoperative in the actual formation of the judgment yet help to determine the manner in which it is felt by the thinker. This latter type of case has received some attention from ethical writers. Prof. H. Sidgwick, in discussing unreasonable action, refers to the obscure consciousness which may accompany a moral decision that the argument by which it is justified is fallacious, or that a different view would predominate if a certain direction of attention were permitted.[1]

The consideration and comparison of these several cases[2] seems to offer support to the assertion of the existence within the thought-process of factors which are at once felt and operative, but the character of which cannot be exhibited or communicated except by directing upon them a process of reflective discrimination, when they appear, not as elements of sensation or of sensuous imagery, but as facts or principles embodied in the forms of language. They may then be referred to in their earlier condition as subconscious elements corresponding to such known facts or principles.

20. The recognition of elements of this nature in consciousness does not seem to be a wholly unimportant matter for psychology. It may indeed be possible to give a serviceable account of most of the facts of "implicit inference" solely on the hypothesis of unconscious cerebral conditions operating to lead the mind to its conclusions—conclusions whose grounds become felt for the first time when they are conceived according to the forms of language. It may be impossible to refute such an account by reference to any special case, seeing that the subconscious must be ever as such speechless and incommunicable. Nevertheless a psychological description which does not admit the existence of subconscious factors appears false to our experience of the movement and development of intellectual life. Those who have described this movement most vividly, whatever their terminology, have not failed to draw attention to the intermediate stages in the waxing and waning of ideas, and to

[1] "Unreasonable Action," MIND, vol. ii., N.S.

[2] That case might also be contrasted, not of inferential judgment at all but in which the mind is aware of making a mere guess and the peculiar feeling of justifying ground is absent.

the continual transition in thought from obscure to more complete apprehension. Prof. James in his doctrine of 'the fringe' has supplied a term of reference for the obscure factors of a conscious state which have ceased to occupy, or have not yet entered, the centre of discriminating attention; and in his picturesque fashion he has described the movement by which thought irradiates these obscure elements. "The rush of our thought forward through its fringes is the everlasting peculiarity of its life. We realise this life as something always off its balance, something in transition, something that shoots out of a darkness through a dawn into a brightness that we know to be the dawn fulfilled."[1]

Dr. Stout's doctrine of implicit apprehension includes reference to the same experienced transition. "The whole process of consciousness," he says, "so far as it has continuity of interest consists in passing or trying to pass from indeterminate to determinate apprehension."[2] And he speaks of a peculiar experience, a feeling of tendency, as the distinctionless unity of the implicitly apprehended whole passes into multiplicity.[3] It is such a feeling of tendency such a "struggling" of the "multiplicity somehow wrapped up in the distinctionless unity" of the felt which appears to characterise the moment of conscious effort to justify a conclusion to which the mind has sprung as it were 'intuitively'. It may be that the act of attempted discrimination is unsuccessful. The doubtful 'dawn' of thought does not at once pass into the "brightness that we know to be the dawn fulfilled". Then while we grope for some conception that may express that obscure meaning of which the dim wealth seems to heave below the threshold of clear consciousness we have a vivid and special experience of what in less noticeable form appears an ever-present constituent of our intellectual life. We realise more forcibly through the arrest of the process, as it were in mid career, the nature of the earlier stage of that transition which may be well described as the everlasting peculiarity of our thought—the transition from obscure or subconscious to clearly conscious apprehension.

21. A distinction remains to be considered to which reference was made earlier in the course of this essay, but which the foregoing discussion may seem to have lost sight of. That distinction was between elements subconscious in the

[1] "The Knowing of Things together," *Psychological Review*, vol ii., No. 2.

[2] MIND, vol. ix., N.S., p. 5.

[3] *Analytic Psychology*, vol. i., p. 95.

sense of being incompletely penetrated and utilised by thought, and elements subconscious in the sense of occupying little room in the mental area, eluding introspection by the swiftness or slightness of the disturbance they produce in consciousness. Elements of the latter type, it was suggested, may belong to thought proper—may be conceptual in character—and are perhaps better termed 'implicit,' allowing the term 'subconscious' to be reserved for mental factors below the level of conceptual thought. Now when Prof. James speaks of the fringe, or Dr. Stout of implicit apprehension, they evidently include in their discussion reference to elements of truly conceptual character. The fringe, it is said, gives the full conceptual significance to the phrase, or image, or special detail of perception which serves as the nucleus of the conscious state. In the fringe is 'implicitly apprehended' the central topic or permanent object of our thought which each special apprehension specifies and defines.[1]

In this sense the fringe is evidently regarded not as supplying the felt material gradually irradiated by thought, but rather as pertaining to the structure of the judgment itself. While we think, framing our thought in words or setting it out in images, only a fragment of the thought can be at any point of time thus actually embodied. It is through the existence of a psychic fringe, or of implicit apprehension, that we grasp the thought—the judgment with its discriminated grounds and consequences—as a whole, and are not shut blindly into the moment of an 'ignorant present' with a single unmeaning detail for an object. If then this is what we are to understand by the fringe of thought, or by implicit apprehension, is it only through a confusion that the statements of James or of Stout can be quoted in favour of the reality of the gradual irradiation of feeling by thought as a continual feature of our experience? I think it is not a confusion. In matters such as these—in the attempt to give a picture or schematic description of some aspect of the living whole of experience—every distinction made is of necessity in part artificial, and inadequate to 'the subtlety of Nature'. The psychologist must group and regroup his materials, admitting, for different purposes, distinctions that run athwart one another, if, by any means and from different points of view, an adequate representation may be gained of the myriad-sided pulsing life he has to portray. In this way, as it appears to me, the vivid description which Prof. James has

[1] Stout, *Psychology*, bk. i., ch. iv., § iv. James, *Psychology*, vol. i., ch. ix., pp. 255, 259, etc.

given of the thought of the moment, as containing a 'fringe' and a kernel or nucleus, passes over, or runs together, a distinction which may profitably be drawn. In the fringe are elements which offer material to the advancing thought —elements felt but not yet organised within the structure of the moment's judgment: in the fringe are also elements which do form part of the thought's structure—part of the content displayed as an object before the mind—but which nevertheless lack at the moment definite separate embodiment of symbol or imagery. We speak, as it were, from the point of view of 'the passing thought'. The psychologist, checking for analysis the thought at some moment of its career, recognises its 'forward outlook' toward elements not yet brought into the conceptual structure: at the same time he may recognise as also present inexplicit elements which are fully organised within that structure. Those portions of an argument which have just been elaborated by the help of words cannot of course exist together in the mind—as they may exist, for instance, in the pages of a book—duly separated and symbolised each at full length. The subjective magnitude as it were of the several parts, their position with reference to the central point of attention, changes and shifts at every moment, yet the significance of the object as the mind views it, the organisation of the objective content, is not, or need not be, disturbed with these subjective changes. That part of the argument, or scheme, which having been elaborated ceases to occupy the moving focus of attention may remain 'distinctly conscious' in the sense of being ordered and articulated by thought, each element having its value and relations fixed within the total thought-object, so that the mind can as it were view at a single glance that which before was grasped only piecemeal, and laboriously constructed bit by bit. It is to such a moment of wide-reaching mental grasp that Lotze seems to refer as affording us a hint or suggestion of that state of silent insight into things which forms our conception of the toilless omniscience of God.[1] We seem, through the movement of discursive thought aided by language, to have gained a glance at that "prospect from the hill-top"[2] which it is the purpose of all the devious paths of thought and the mechanism of speech to attain.

Yet such a synthetic conceptual apprehension though possessed by an individual mind as a whole can be communicated in its complexity only so far as the whole is broken up into

[1] *Microcosmus* (chapter on language). [2] Lotze, *Logic*, § 345.

its elements and each element embodied in appropriate verbal symbolism. So essentially is the conceptual structure dependent upon language for its original form, and its common or objective character, that linguistic embodiment becomes in part the test by which to estimate clearness and fulness of thought-realisation. We contrast the way in which the component parts of the complex apprehension appear within the whole with the manner in which they appear when separated and symbolised by words, passing successively through consciousness, accompanied, it may be, by an escort of sensuous imagery, and of sensation as the motor mechanism of speech is brought into play. It is in contrast with this more exclusive occupancy of consciousness, this greater felt strength and prominence, that the elements of the synthetically apprehended whole are pronounced dim and implicit, even although their conceptual significance remains intact.

22. Having attempted to bring out the distinction between the subconscious on the one hand—the merely felt, and 'the inexpressible' as being not yet related and organised within the thought process—and, on the other hand, the implicit—the unexpressed at the moment, and thus not prominently and separately felt, though organised within the structure of the judgment—we have now to notice an approximation between these two types as they exist within the succession of mental processes. What is merely felt as regards its relation to the thought of the moment, is nevertheless, as was previously considered, dependent in a greater or less degree for its felt character and influences upon prior thought-activity. Upon the kind and amount of such prior activity it will depend in any given case whether the subconscious is sharply distinguishable from the implicitly conceived, or passes almost imperceptibly into it. For an individual accustomed to feel and act with but little reflexion and self-consciousness it may be an extremely slow and difficult process to translate by the help of language, the principles which are felt in the operations of his mind into the form of conceptual apprehension. At the moment of making the effort there has been comparatively little thought-work in the past to prepare the elements which arise in feeling to enter a conceptual structure. Thus the full degree of that assistance is required which language is capable of rendering when deliberately employed in the making explicit of thought. But in the case of a mind accustomed to organise its experiences, as they occur, in accordance with the forms of speech and thought—a mind penetrated with principles, acquired through study and discussion, which it is ever on

the alert to apply—if a new case should arise in which judgment with a felt justification precedes reflective reasoning still the connexions operative are ready to flash before the mind in conceptual form—to spring into realisation as elements synthetically conceived without awaiting the slower process of analysis through the medium of speech, inward or pronounced.

In such a case if the thinker is called upon to expound his swiftly reasoned judgment to others, his meaning, as he apprehends it, looking forward as it were during the process of speech, will not exist merely as the inarticulate felt thing that language must realise or bring to birth. The meaning may be distinctly conceived independently of, and prior to, its actual expression. Then if the speech embodiment adds anything to the conceptual significance of the thought this addition may consist chiefly in a new and special social aspect realised. The thinker embodies his thought in words, not that he may apprehend it himself, but that others—perhaps some particular person—may do so, and what the verbal expression adds is the idea of the thought as realised in another's mind, transplanted to that new soil and built up there from the resources which that mind may be supposed to possess. This is the feature which in the work of the teacher may give interest to the exposition of the most familiar truths. It is the apprehension of what the particular hearer can supply—of what the words will mean for him—that brings out the thought in a new light as the thinker expresses it. The hearer in this case, then, as represented in the mind of the person who seeks expression, is no longer the critic under whose scrutinising glance the originally obscure wavering thought must be moulded to a firmer outline; he is rather the learner for whose sake the thought already clear, fixed, and objective, must be analysed again into its elements, and those elements embodied in a duly impressive setting of illustrative imagery and verbal symbolism.

We see in this way how the actual process of linguistic formulation in any given case assumes a somewhat different function toward the unspoken sense of meaning that precedes it, according as that meaning is less or more fully organised by processes of prior thought and expression. Thought, though dependent upon language for its first emergence into clearness from the felt or subconscious stage, may, to some extent, preserve that form which language has impressed upon it, in the absence of any actual verbal symbolism; and in proportion as it does so, and is capable of realisation in a new mental context without repetition of

the discursive process of relating, and distinguishing, it falls under the head of what we have called synthetic or implicit conception.

23. The importance of both the subconscious and the implicit element, the nature of which we have endeavoured to indicate, might be further brought out in various ways, and exhibited in various spheres of study. We might refer to the discussions which form part of the basis of Ethics, concerning the nature of reflective and unreflective goodness, of reasoned and 'intuitive' moral judgments. The recognition of conduct not consciously directed to any 'supreme end,' but unreflectively moulded into conformity with principles 'breathed in' from the social atmosphere, is necessary to every ethical theory. So again we can hardly approach the consideration of the nature of moral judgment without taking account of the fact that the ground and justification of such judgment is generally subconscious only, in the mind of the individual. The importance of the 'implicit' factor appears when we consider the problem as to how far the full value of reflective striving after good may be condensed into the swift semi-conscious volitions of the character that has moulded itself into habitual conformity to virtue. It is, however, in the sphere of Logic, or rather in respect of the practical application of logical doctrine, that the consideration of the topics discussed in the present essay would appear most immediately relevant. The 'abstract logician' may perhaps confine his attention to the bare forms of thought as made explicit in language, but it is necessary that the practical logician—the logical critic of argument—should bear in mind the existence of subconscious and of implicit elements filling out the thought as actually apprehended by the thinker. The expressed argument with which the critic has to deal may be as it were a mere skeleton fragment clothed upon and made living in the mind of its author by a wealth of personal suggestions, dim tendencies remaining from experience of the past, which it seems almost impossible to formulate. It may be that the logician can afford help in bringing to light some of these obscure elements, as the Socrates of Plato brought to birth the latent knowledge of those whom he judiciously interrogated. It may be said of the individual trained in the logical analysis of thought that his point of superiority lies in the putting of questions, rather than in the answering of them: he should know how to state the case and how to go about the search for elements yet missing.

But the logician abuses his power over the forms of explicit

thought when he employs it to entrap and put to confusion persons whose true meaning is not so futile as are the argumentative plungings they are drawn on to execute.[1] Especially when we come to consider such inferential judgments as are formed in daily life, concerning events, situations, and individuals, whose character, in reality and in their relation to the thinker, is actually unique—only scantily outlined even by elaborate combination of the concepts under which they might be brought—we realise the necessity of the personal or subconscious factor in inference. The individual feels, as he cannot conceive, the case in its concrete fulness, feels its influence through all the hidden structure of his mind as moulded by his personal experience, and, feeling it, makes response by a judgment or volition behind which, as justification and source of necessity, lies the whole inarticulate felt self rather than any definite thought. Reflecting on such cases as these we are compelled to recognise the limitations of logical formulation and criticism, and the futility of the claim, if put forward without restriction in the name of logic, that no belief should be entertained with greater assurance than proofs can be brought forward to warrant.[2]

That which, in distinction from the subconscious, we have spoken of as the implicit element in thought may also be of some importance as a limiting factor in respect of the application of logical forms and schemes in criticism. This is especially the case in view of the relatively isolated condition in which arguments are frequently presented for analysis by the student of logic. It is necessary to recognise that a scientific argument as completely conceived in the mind of the scientist may be indefinitely stronger than the most carefully trained logical thinker, who is not himself an expert, is able to estimate. The results of thought and research through the whole sphere of the subject concerned go to build up a structure of ideas in the mind of the expert which may "receive with the grip of necessity" the special points of the particular argument, confirming and filling in the framework of the ostensible proof. This ideal background, with the force of intellectual necessity that it confers, must be absent from the argument as transferred in relative isolation to the mind of the non-scientific reader.

It is impossible to do more than indicate these considerations which might be worked out in a fuller treatment of

[1] *Cf.* Sidgwick, *Use of Words in Reasoning*, p. 78.

[2] *Cf.* Locke, *Essay Concerning Human Understanding*, bk. iv., ch. xix., § 1, and Newman, *Grammar of Assent*, p. 162, *sqq.*

the inexplicit elements of intellectual consciousness. The design of the present essay will have been accomplished if any advance has been made toward a clearer formulation of the nature of these elements and of their relation to explicit thought.

(*Conclusion.*)

IV.—TIME AS DERIVATIVE.

By V. Welby.

The idea of Time is always found bracketed with that of Space. But not only this. With rare exceptions the two seem to be treated by thinkers of all schools as equally original and originative categories, joint and co-equal generators and rulers of our experience, perceptual and conceptual. This being so, it is supposed to be indifferent which we put first and which second. The most opposite views, even the objective and subjective, have agreed on this point of the equal status of Space and Time; if there has been any difference it has been in the direction of exalting Time (as the ultimate condition both of action and of thought) over Space.

The following suggestions are made wholly from the starting-point of our presuppositions; from the initial, germinal, as it were nuclear ideas which come fresh from the generative matrix of primitive awareness, or of *sense*, as an organism may be said to 'sense' or have a sense of the condition in which it lives.

From this homely standpoint then—one which requires perhaps some detachment from the natural attitude of the highly trained mind—I venture to suggest that whereas Space is the primary and inevitable 'Room' for change, motion, sequence, succession, measure, number and direction, Time is the product of our experience of Motion and its condition, Space. It is in other words a translated application of these two really original ideas.

For after all what else is Space but Room for all else? In our ordinary view of the matter we speak as if the Room to experience, think, reflect, could be set over against, as independent of, Space: and we call it 'time'. But this is a spatial idea. Or we enlarge the idea of Time, make of it a master-thought, and speak of change, sequence, succession, persistence, duration, as contained within it. But to enlarge and to contain are spatial ideas. We speak of feelings, ideas,

thoughts, conceptions, as following each other. But to follow is a space-motion idea; and so on. Try as we may we can never get away from the idea of Room in which to move, to exist, to think, to experience.

Yet, while we speak of vast periods of Time, or of the short space of Time at our disposal, and so on (all spatial ideas)—while the very idea that Time has length, a 'dimension' of its own, is spatial—we still persist in putting Time and Space, whether as objective or as subjective, side by side, as primary factors or conditions of experience. But you can only couple things or put things side by side, or before and behind, in Space. You can only change them, you can only have the sequent, the con-sequent, or the sub-sequent, in Space. You succeed or persist or endure in Space. The very word 'in' betrays your spatial premiss.

It remains to be recognised, however, that since we are compelled, in speaking of Time, to ignore two spatial dimensions, we cannot therefore give the difference between Space and Place in temporal terms. It may be objected that we can do this as on one line, in one irreversible direction. But from the present point of view this is arbitrary and illusory: other directions are implicit in each direction, as other positions are implicit in each position. Man measured Space before he measured Time. You can speak of a space of time but not of a time of space: of a given measured interval of time but not, *e.g.* of a week of space. You can speak of a position in Time but not of a Time in position: of a course of Time, but not of a Time of course: of a length of Time but not of a Time of length.

The evidence, however, for the spatial and motional derivation of the vocabulary of temporal expression is so voluminous that it cannot be adduced here. Any accredited Etymological Dictionary would give enough examples on almost every page. Nor is it relevant here to urge the obvious danger, in such a question as this, of relying wholly upon etymology. For it must be remembered that the evidence (or suggestion) of single words is one thing, and that of widespread habits of speech leading, in the most diverse languages, to a multitude of varying forms which all involve expressing the idea of Time by a spatial term, is quite another. In truth we are not now considering merely a vocabulary or its derivation; we are discussing the *ideas* which suggested and developed the terms that symbolise them, and the empirical source of those ideas.

And just because an inquiry of this kind refers us back to the most primitive form of our ideas—to the earliest efforts

and effects of 'mind'—the fact that Time has no vocabulary of its own, but has to borrow all its terminology from Motion and Space, may be found to hold for us a significance hitherto unsuspected: as in truth the fact itself, for that matter, has almost entirely escaped notice.

Illustrations of this borrowing process are easily found; would indeed fill volumes. One or two may here be useful:—

Prof. Royce,[1] who would make the moral law dependent on our present view of Time, tells us that it refers

"to intended consequences of action, in so far as they follow one another in a time-sequence, or may be conceived as in such a sequence. Whoever says, 'I ought to do thus or thus,' stands in a present moment of time, and looks forward to a future. His present decision is to be followed by a course of action."

The ideas of following, standing, looking forward; of a course, and of definable place, are obviously borrowed from Space and Motion. In the same way 'before' is before a man *in a place, on a spot*, in Space, and 'after' is what follows or remains *behind* him. As Prof. Baldwin puts it:—[2]

"The 'before' and 'after' of time rest primarily on the analogous distinctions of position in space, the 'here' and 'there' successively occupied by a moving body. The continuity of time is derived from the continuity of motion, which, in turn, depends on the continuity of corporeal extension. Magnitude, motion, and time all go together. So pervasive are these conceptions that Aristotle does not hesitate to speak of time as the number of the local movement . . . in which the 'now' is, as it were, borne along, like a moving point in space, as the generating unit."

Again, we sometimes see Time figured as a traveller hastening his steps: *e.g.*,[3]

". . . we are warned by an astonishingly rapid sequence of events, all to the point, that Time has changed his pace and goes more nimbly as the world grows smaller. How swiftly the forces of competition have gathered about us of late every man may see; and the spectacle should teach us to prepare for certain consequences soon rather than late."

Time of course can no more change its pace than Space its intervals or distances. But what, in passages like this, we call Time, is really our conscious experience; which changes its rate of progression in terms of our interest, just as motion increases or lessens in velocity under given pressure, attraction, etc.

Before going further it may be well to give some out of a multitude of examples of what we seem to lose in clearness

[1] *The World and the Individual*, series i., pp. 343-344.
[2] Art. on 'Time,' *Dict. of Phil. and Psych.*, vol. ii., p. 699.
[3] *The Pilot*, 28th December, 1901.

and coherence by the prevailing treatment of the problem of Time; as well as a few cases in which the view here taken seems to be implicit.[1]

Prof. H. N. Gardiner[2] declares that

"Newton's conception of time is full of obscurities and contradictions. An absolute time with an independent flow would seem to require another time in which it flowed and by which its rate of flow was measured, and so *in infinitum*. And the flowing of time, if literally taken, is quite unintelligible. Does it flow as a whole, or only in its parts? There is absurdity in either supposition. For if it flow as a whole, then as the whole of time includes both past and future, the latter must be always existent simultaneously. And the same is true if only the parts flow, for these are its parts. But does it flow at all? Why does it not rather 'stand' as the permanent medium for the flowing sequence of events? But this, too, is also impossible, if the purely objective view of time be taken; for the parts of time are successive."

This criticism of the 'flow' of time is a valuable witness to the confusion which results from inconsistency in the use of the spatial terms to express temporal experience, and our failure to recognise the true reason for such relevance as they have. Meanwhile flow (like flux), is a term of motion.

Prof. Gardiner further suggests that[3]—

"It is doubtful, therefore, whether other ideas of time might not have been developed, or may not, in other orders of intelligent existence. And even with the same order of time considered abstractly, there is perhaps no contradiction in thinking an entire reversal in the order of the content.

The abstract conception of time is full of difficulties and contradictions. Succession and duration are both essential, yet each, for itself considered, negates the other. In its uninterrupted succession time has no standing, but 'flows,' yet all succession is conceived of as being 'in' time as a sort of unity. But in time itself no unity is discoverable."

He considers that in these difficulties and contradictions we have the origin of the idea that Time is purely subjective.

"Time may then be condemned as mere 'appearance' opposed to 'reality'. But the terms are ambiguous, and it is better to consider everything as real which is strictly taken for what it is and not taken for what it is not."

Indeed the whole subject is admitted to be ambiguous. Can we wonder? The writer concludes:[4]—

"Much of this criticism, however, loses its force when it is pointed out that the form of change, as such, is not time at all. Aristotle already distinguished between motion and time as number of motion. Time is a certain arrangement and measure of motion, a further determination of the content."

[1] Quotations have been purposely confined to the more recent attempts to deal with the difficulties inherent in the subject, as these attempts mostly involve some form or degree of criticism of the orthodox or at least traditional views.

[2] Art. on 'Time,' *Dict. of Phil. and Psych.*, vol. ii., p. 702.

[3] *Ibid.*, pp. 698-699. [4] *Ibid.*, p. 704.

Prof. Calkins complains[1] of the traditional definition of time, on the ground that it confuses what lasts with what succeeds. And she would identify Time not with duration but with succession.

"To the question, What is time? the traditional answer is from the outset unsatisfactory, for it enumerates two distinct attributes of time, duration, and succession, without giving an inkling of their relation to each other. . . . Now if we are to choose between succession and duration as expressions of the real nature of time, there cannot well be any doubt of the decision. Things endure, qualities persist, one experience outlasts several others, but the essence of time is its restlessness, and the nature of time is the multiplicity, the succession, of its moments."

But this is really doing violence to our perfectly true instinct of requiring Time as Space in which we may journey through life—moving ever forward. And we might as well endow 'motion' itself with a 'restless nature,' words which indeed only apply in the organic sphere.

Reviewing Mr. Shadworth Hodgson's *Philosophy of Reflection*,[2] Prof. Carveth Read asks what we mean by Time, and having answered that it is "hard, nay impossible, to say," he continues:—

"Of that mature sense of time which is at once as clear as an intuition and as massive as an emotion, it is indeed possible to give an analysis and description. But of the time-element, so to speak, of which the sense of time is a clarified accretion, no account can be given: it is an ultimate experience, the most ancient and simple of all that we know. This, however, one may say, namely, that time is not space, but in every way contrasted with space. Yet it is difficult to help suspecting that the curious speculation about statical time entirely arises from a confusion of time with space; a confusion greatly favoured, and made almost unavoidable except to the most resolute clearheadedness, by our common modes of measuring time by means of space and motion; by the entanglement of space and time in their psychical genesis, and by the fact that with time, as with other things, when we try to think of it we try to look at it, and we can see anything only as in space."

This seems at least a little like saying that after all, the most ancient and simple of all conditions that we know is that of Space, first realised as room to move in, and then as room for seeing in. That there are difficulties and confusions in the subject is admitted; but it may at least be suggested that they have their origin in our preconception of Time as a primitive experience "in every way contrasted with Space". If it had been this we certainly could not have used and would not have chosen the terminology of Space to express Time. Prof. Read is, however, consistent

[1] "Time as Related to Causality and to Space," MIND, April, 1899, p. 218.

[2] MIND, January, 1880, pp. 72-73.

in declaring, further on, that Time strictly speaking has no dimension; and in proposing that we should imagine Time in a new way. This new way seems, as does popular usage, to identify succession and duration, sequence and persistence, with Time. In his recent work[1] Prof. Read admits that

"the vagueness and subjectivity of times perceived or remembered makes them hard to measure and arrange. So to measure them we turn to things external and take the motion of some body as a constant; then construct a calendar and insert it in our own history, and are apt to think we remember the order of events when in fact we read them there."

He then remarks

"yet it" (time) "far transcends any need we have for it. In animals who have little need of memory and foresight, the development of the perception of Time is backward in comparison with Space, Matter and Motion. And this seems also to be true of children; still even in them the sense of Time is so far developed before the rise of self-reflexion, that it is known as that in which we live and not as our invention. And though less clear and distinct than Space, Time is more comprehensive; for Space is only the form of phenomena, but Time of all consciousness; and therefore it is more real than Space, because consciousness is Reality." He adds, "But the comprehension of Time by man, transcending all utility, belongs to the world's self-knowledge; and, I suppose, the dimness of our comprehension is the still unlifted veil of that knowledge."

May not the dimness of our conception of Time, and the backwardness of the sense of Time in animals and children having a keen sense of Space, be due to the dependence of Time on what to them is the master fact of Space in the sense of Room? Again[2]:—

"The simplest perception of Time comprises a Duration in which Future, Present, and Past are all present . . . we conceive of a Duration that may be represented by a straight line; though nothing can be less like a line than our actual experience of Time. Then, to this line all the determinations of one dimension of Space become applicable. Any point within it being taken, the opposite directions from this point represent Future and Past, which may be measured by any unit; and then durations may be compared."

Here at least we find a practical admission of the subordinate character of Time as representing one dimension only of a Space which involves three; a time, again, using one only out of a wealth of directions which a straight line, even if irreversible, may take. Surely the expression of the temporal in terms of an irreversible advance in one direction only along a straight line, almost implies our recognising Time as a translation, so to speak, of one chapter—or perhaps of the

[1] *The Metaphysics of Nature*, pp. 178-179.
[2] *Ibid.*, pp. 295-296.

first volume—of the great Book of Space. And even when the word 'Time' is replaced by 'Duration,' as in the passage above quoted, Duration is still a Space: it is room in which Future, Present and Past can meet. Meanwhile to speak of the Present, as well as Future and Past being *present*, is an extreme instance of the incoherence into which we are constantly betrayed by the attempt to consider Time as an independent category, an intellectual term with an intension and extension entirely its own.

There is a passage in Prof. Karl Pearson's *Grammar of Science*[1] dealing with the relations between Space and Time which, familiar though it is, it will perhaps be well to quote here:—

> "Space and time are so similar in character, that if space be termed the breadth, time may be termed the length of the field of perception. As space is one mode in which the perceptive faculty distinguishes objects, so time is a second mode. As space marks the co-existence of perceptions at an epoch of time—we measure the breadth of our field—so time marks the progression of perceptions at a position in space—we measure the length of our field. The combination of the two modes, or change of position with change of time, is motion, the fundamental manner in which phenomena are in conception presented to us."

It is true that here also we find Space and Time bracketed as of equal importance. But it is done in an original and very suggestive way. And such experiments in expression must tend, while preserving distinction, to show the existence of a much more intimate connexion between the two ideas than has usually been realised. As a fact, in this passage Space is already virtually if tacitly enthroned as the ruler of our perceptual scheme. For the space-sense includes the time-sense—as the surface includes the line—while the converse does not hold.

Nevertheless if we say that Space is the breadth and Time the length of the 'field' of perception, *where are the depth and the height?* Where is the third dimension or its analogue? It seems to be suggested that 'change of position with change of time'—that is, Motion—is the third dimension. But we are thus using a terminology which only in the first case, that of Space, directly and actually applies; breadth is part of the idea of Space, and so is length, while the 'field' we are supposed to measure is also inexorably spatial. In the third case, we have a *double figure;* for as there is neither breadth nor length in what we call Motion but only velocity and direction, so there is neither height nor depth, and no volume or thickness.

[1] Second edit., p. 180.

Mr. C. S. Peirce suggests in a private letter that the motion-space terminology of Time is only the inevitable consequence of the fact that the source of *all* imagery must in the nature of the case be 'space,' since gesture and attitude reinforced by sounds must precede ordered articulation. But if this is so, how comes it that Time is the only mental category which has no original terms of its own?[1] By the same argument we should expect to find that all the categories would, like Time, have to be expressed in terms derived from Space. Of course categories like Number and Quantity have spatial *reference;* but that is all; while we have such categories as, *e.g.*, Quality, or Value, which seem to the plain man to have none.

Prof. W. James observes that—[2]

"Most people will think they directly perceive the length of the past fortnight to exceed that of the past week. But there is properly no comparative time *intuition* in these cases at all. It is but dates and events, *representing* time; their abundance *symbolising* its length. I am sure that this is so even where the times compared are no more than an hour or so in length."

Whereas we do directly perceive the difference between a shorter or longer line in space. The above, as far as it goes, is in line with the view here taken. Further, he says:—[3]

"It must be admitted after all, however, that the great improvement of the time-perception during sleep and trance is a mystery not as yet cleared up. All my life I have been struck by the accuracy with which I will wake at the same *exact minute* night after night and morning after morning, if only the habit fortuitously begins. The organic registration in me is independent of sleep. After lying in bed a long time awake I suddenly rise without knowing the time, and for days and weeks together will do so at an identical minute by the clock, as if some inward physiological process caused the act by punctually running down. Idiots are said sometimes to possess the time-measuring faculty in a marked degree."

And I should suggest that it is not 'time' at all which we in common with idiots and even with some animals, to say nothing of plants, thus automatically gauge. It is succession. It is the condition of arrival at a given point in an experience-space: in the space, *viz.*, which is the condition of that forward movement of mind which we call experience and for which we must have room. Life seems to have an instinctive 'sense' of *where* it is, comparable to the 'sense' which the magnet has of the north.

In the January number of MIND, Mr. Rutgers Marshall

[1] For instance: The terms of Space are spatial. The terms of Motion are motional. The terms of Number are numerical. The terms of Form are formal. But the terms of Time are not temporal.

[2] *Principles of Psychology*, vol. i, p. 623. [3] *Ibid.*, p. 623 (footnote).

speaks of the "close relations between the algedonic and the time qualities" (p. 20) and compares the temporal norm, or presentness, to a central zone of indifference between pleasure and pain. But, accepting for present purposes the conception of the algedonic norm as indifference (having a negative value), can we take such indifference as a fitting analogue to that Now, that presentness, compared to which all that is past, as all that is coming, is shadowy?

Again, Mr. Marshall claims to show that "timeness is a general quality of all presentations, of a three-phased nature" (p. 26). But surely they rather suggest that this general quality is Spaceness, from which Timeness is a natural derivative.

The first instance in which I have seen the spatial character of Time distinctly brought forward from the philosophical standpoint, is a passage in "The Metaphysics of Time" by Prof. Walter Smith.[1]

"The first thing to be noticed in regard to time is its spatial character. This statement is not a mere paradox. When a succession of events is thought of, the events are ranged in spatial order. We speak of time as long or short; we speak of the distant past and the near future, or of the receding past and the coming years; we 'look before and after'. These expressions are not simply figures of speech; they indicate what forms are present in consciousness when a temporal succession is referred to. Nor does this spatial form of the temporal series mean merely that images originally intuited in space are reproduced with this spatial character. If the images simply arise and dissolve in what seems to be one space, there is little if any perception of time; when the sense of time is present, the images of the past recede into the distance. It is very important to note this feature of the time-concept. It has received too little attention from students of the mind. Kant speaks of time as a line; and psychologists are learning to regard time as a projection at right angles to the plane of the present. But that this spatiality is essential to the time-concept has not been, in general, recognised. To F. A. Lange belongs the credit of having given it due emphasis."

It will be seen that, broadly speaking, this statement implies the position here taken. It will also be noted that Prof. Smith remarks of "the spatial form of the temporal series" that "it has received too little attention from students of the mind"

From these quotations it should at least become plain to the reader that Time may well be the ambiguous and evasive term which philosophers find it; sometimes playing the part of room for an onward progression, and sometimes that of some unnamed entity which flows or lapses, flies or crawls, fails or is lacking; borrowing one dimension and one direction

[1] *Philosophical Review*, July, 1902, p. 372.

only from the category of Space, borrowing velocity from that of Motion, borrowing indeed even from those of Matter and of Life, but never having anything of its own by which it could be known or called.

Before proceeding further on the line here taken, it seems desirable to cite two French thinkers, M. Henri Bergson and M. Guyau (edit. by M. Fouillée). In neither case was I acquainted with their views on Time till after most of this Paper had been written; but it will be seen that the inclusion of quotations from them is of special importance, as they are in substantial agreement with its contention,—to an extent indeed which might seem to render fresh statement superfluous. It appears, however, still necessary to show that conclusions like theirs may be reached from a different startpoint; and to submit the relevance of further applications of the view here suggested.

As M. Bergson is a thinker whose reasonings on the subject of Time are not only penetrative but comprehensive, it is difficult to choose out of many relevant passages. But two quotations may here be made (from a chapter called 'Le temps homogène et la durée concrète' [1]) in which he goes even further than I do in protesting against our ordinary ideas of the 'place' of Time in experience :—

"Il y aurait donc lieu de se demander si le temps, conçu sous la forme d'un milieu homogène, ne serait pas un concept bâtard, dû à l'intrusion de l'idée d'espace dans le domaine de la conscience pure. De toute manière, on ne saurait admettre définitivement deux formes de l'homogène, temps et espace, sans rechercher d'abord si l'une d'elles ne serait pas réductible à l'autre" (pp. 74-75).

The important distinction between *time* and *duration* is one upon which he lays much stress not only throughout this book but elsewhere. But the temptation to extensive quotation and comment must be resisted. It is here enough to note M. Bergson's significant declaration [2] that

"Il y a, au fond de cette distinction radicale entre les deux séries temporelle et spatiale tant d'idées confuses ou mal ébauchées, tant d'hypothèses dénuées de toute valeur spéculative, que nous ne saurions en esquisser tout d'un coup l'analyse" (p. 155).

Even more striking is the witness of M. Guyau's *Genèse de l'idée de Temps*, edited and his arguments reinforced by M. Alfred Fouillée. Here we see the present standpoint emphasised and the corresponding conclusions justified. Perhaps what may be found most startling and suggestive

[1] *Essai sur les Données Immédiates de la Conscience.*
[2] *Matière et Mémoire.*

among the many passages which might be cited, is the following summary of the conclusions shared by MM. Guyau and Fouillée :—

"Selon nous, le temps n'est qu'une des formes de l'évolution ; au lieu de la produire, il en sort" (Conclusion, p. 119).

For the present purpose it is enough here to point out the explicit terms in which they affirm the history and the status of the Time idea. In regard to the first they remark :—

"De tout ce qui précède nous conclurons que le temps n'est pas une condition, mais un simple effet de la conscience ; il ne la constitue pas, il en provient. Ce n'est pas une forme *a priori* que nous imposerions aux phénomènes, c'est un ensemble de rapports que l'expérience établit entre eux" (Conclusion, p. 117).

But they also appeal to the psychology of language :—

"Toutes les langues primitives expriment par des verbes l'idée d'*action*, mais toutes ne distinguent pas bien les divers temps. Le verbe, en sa forme primitive peut servir également à désigner le passé, le présent ou le futur. La philologie indique donc une évolution de l'idée de temps" (p. 6).

Moreover, they lay stress on the spatial character of Time : "L'idée du temps, selon nous, se ramène à un effet de perspective" (Preface, p. ii.). Again, "Le temps passé est un fragment de l'espace transporté en nous ; il se figure par l'espace" (p. 39). This view is summarised at the end thus : "Le temps n'est autre chose pour nous qu'une certaine disposition régulière, une organisation d'images. La mémoire n'est que l'art d'évoquer et d'organiser ces images" (p. 117).

It will be seen that on the whole the present view here receives notable support. I conceive that the idea of Time has arisen because, becoming aware of, or realising, experience in its aspect as a sequence of change, we need to measure it. Borrowing a space idea for the purpose, we measure it as a line, we see it in perspective. The 'measure' of experience thus gained we call Time ; but it is only a metaphorical application of a space-idea, and for that reason has (as we have seen) to be content with an entirely borrowed vocabulary. Moreover, as the application of space-ideas and space-terms in this context is vaguely metaphorical (Time not covering the 'whole ground' of Space, and giving us but one irreversible direction) they remain inconsistent in use. This inconsistency has at least value as testimony to forgotten truth. Time, on the one hand, enthroned as a primary category, and on the other numbered among the actual facts of life, is in fact but an inference or a translation found

expedient in practice, and has no existence in the sense in which Space has existence.

In his (Aristotelian) Essay on Primary and Secondary Qualities, Prof. Stout claims that "we are justified in thinking of matter as extended and movable in space before the existence of sentient being"; and taking as his chief example "the most fundamental of the primary qualities—Extension" —he continues:—

> "In ordinary language it seems strange to speak of sensations as extended. The reason is that they are not extended in the same sense as corporeal things. Bodies are extended in space. But touch and sight sensations do not in the ordinary sense of the words occupy Space."

Now here he has wisely entrenched himself in the very citadel of his subject, the question of the divers *senses* in which we may speak of Space. But in this context I submit once more that whereas Time may be defined as being *in a sense* Space, or as a form of Space, as *room* to think in, etc., *Space can never be defined as in any sense, or as any form of, Time.*

At this point also there is a remark to be made. We are here dealing only with Space and Time, both used in conjunction as ultimate terms by almost all writers. But it is surely obvious that Extension (or extensity) has a yet wider application than either, and includes both. Thus it is that we have sensible as well as spatial extension; and further, having extensive interests, make extended inquiries. This, though it be a 'mere question of idiom,' is none the less suggestive.

Further, Prof. Stout points out that real extension is something other than visual extension: for this last depends on sight and touch sensations. And here it must not be forgotten that Sight is in the last resort a development of Touch. Language witnesses to this. We visually be-hold. It may even be said that in the biological context we have already discovered that Time is derived from Space. And "neither tactual nor visual extension occupy any part of the space in which bodies attract each other inversely as the square of the distance".

Extension, then, makes a rightful claim to cover the facts which we range under the heads both of Space and Time. But no way of expressing the idea of Time is more in use than that which represents Time as a moving somewhat with a universal onward motion, carrying 'life and mind' with it. An onward motion, like a part of Space (or, a space) is an original idea, a direct one, a question of 'real existence'.

But applied to Time it is a metaphor *in the sense of a translation.* And therefore we never definitely acknowledge or recognise *volume* in Time thus regarded, though instinctively and unconsciously we come near to doing so. We do say, That week was a 'full' one; my time is quite filled up. We do speak of the "spacious times of great Elizabeth". The subject of reference here, however, is not Time at all, but experience. For as life may be full or empty; as one's interests may be wide or narrow, high or low, great or small, so one's experience may have that range or intensity which takes it out of the narrow line of Time and renders it once more truly 'spacious' even to the general consciousness.

If a man had never known the difference in one moment on one spot between a faint and an intense impression, had never felt the concentration of life at some moments, its diffusion at others, he would say that whatever was more intense must be longer in Time or wider in Space. The idea that the time and place occupied by a faint touch and an acute pang was the same, would be unthinkable to him. But our experience of the fact helps us to see that the ultimate question is one of intensity (physically speaking, one of velocity or concentration); and this brings us to that of value or Significance. Difference of quantity ultimately comes out as difference of quality. Motion would then be the simplest form in which we describe the reality which is ultimate to us. What we express as intensity of Experience is independent of extension in Space or in Time.

Or, returning to the question of origin and varying the expression, we may put it thus: Time is really the translation of diversity-*in*-position, through change-*of*-position, into succession; and is the effect of a mental condition corresponding to the pre-visual stage of sense-perception. Just as the blind man cannot see at once the scheme of objects, the 'scape' before him, but must touch one object after the other and tap out his steps one by one with a stick, so we cannot 'see' the Time-scheme as we can see the Space-scheme together in one act: and thus we erect 'past, present, future' into three 'worlds' which must be dealt with *one in a place*—as we say, at a time—and tap our way through life, touching as it were each 'moment,' each unit of the Time-space.

It is true of course that the blind man belongs to a race which has already developed binocular vision; whereas the truer comparison would be with the animal which has not yet evolved more than a vague sense of light and therefore only feels its way about. Still the general result is the same

in both cases. In a true sense the pre-visual type of organism lives in a world of succession and the post-visual in one also of simultaneity.

Change, then, as occurring in Space, with its conditional or concomitant motion, seems to be the central or original experience. This presupposes Space as well as Motion; and may merely involve variety of aspect or content, which does not necessarily involve perceived Motion, or Time. Then comes the recognition of Motion, issuing from perception of change and succession, in Space. "It has 'changed' . . . it must have 'moved,'" or, "I must have moved" is perhaps the first form of such recognition. Later, we apprehend that Change of position or perspective presupposes Motion. Thus through Motion and as the functions of memory and expectation develop, we ultimately translate Change into Time. But Time is still only a mode of measurement; and that which is to be measured, whatever it may be, 'passes,' 'flows,' is long or short; is somewhat which moves always in one direction, refuses to linger or to hurry; never stops, has no breadth or capacity, and yet may be full or empty. It is obvious that such expressions are purely metaphorical. The clock does not really tell you of the passing or the lapse or the flow of Time. It indicates how far you and your fellows and the world have passed, on an assumed journey. When it strikes it indicates similarly, the mile-stone which you have reached. It is an index of Space plus Motion, plus sequence, and at last plus consciousness, but *still essentially of Space.*

In this apparently incidental allusion to the functions of Memory and Anticipation, it may appear as though we were ignoring or dealing but casually with what, from the very point of view here taken, is of cardinal importance. Whatever, it may be said, may happen to that most elusive concept the Present, it is certain that if there be no past for us to recollect and no future to be forecasted, both memory and anticipation are without a function. But it is at this very point that the present inquiry originally started. Taken from thence it will be admitted that the careful study of memory as of anticipation reveals that they are only ideally referred to a Past and a Future in 'time': both are directly a re-minding, an arousing of awareness; awareness of somewhat spatially there, or passed, or coming: 'future' as 'about to be' is allied to the idea of 'out' or 'round about'. And the present being initially somewhat in our presence, what we recall and what we expect are both present to

us in this sense. Too little notice seems taken of the double meaning of words like 'present'.[1]

As to the past we are apt to suppose that memory is essentially concerned with a 'past' in which things have a static existence. But the essential fact is expressed in the prefix 're'. Re-petition, to re-call, to re-collect, to re-member, as to re-ply, to re-tort, to re-port, to re-fer, etc., are all to repeat, to 'do it again,' a word of which the primary meaning seems to have been 'direct' or 'straight'. Now when we say that the same qualities or characteristics are found in two or many objects in Space—*are repeated*—there is no 'time' in the idea. Re-petition like duplication and multiplication is thus originally spatial.

Present experience turns into a memory (a sort of image-trail in our wake) but we can never, except in the delusions of insanity or delirium, reverse the process. No memory or remembered fact turns into a present experience. We translate this disability and objectify it in a supposed absolute *i.e.*, conceptual Time as a sort of second Space or higher Room, into which all things are brought that come into being, and in which all things that have been (and gone) are hung up for ever. And when it is stated that "all spatial relations involve reference to some time at which they hold between some given pair of entities"[2] I should answer that the 'time' in question depends on the mental 'blindness' which creates the successive; and means our mental arrival at one of the positions to which we have to tap our way, or in music, to beat our way along.

Time has been repeatedly spoken of here as a 'translation' of the idea of Space, and it has to be added that we can translate downwards as well as upwards. Evolution has translated the mechanical into the vital, and translates the amoebic into the vertebrate and mammalian life; that is translating upwards. The conception of Space is capable of translation into, of becoming the symbol of, a 'higher level' of experience. We speak of the wider, of greater and higher in the mental world. We speak of exalted aspirations or motives. But of this further extension, this moral translation, Time is seen to be incapable, except in the character of a product of the Space idea and in a certain sense as a kind of Space.

Change, and its conditions Motion and Space, we have

[1] This is admirably shown in Mr. McGilvary's Article on Green, MIND, Oct., 1901.

[2] "Is Position in Time and Space Absolute or Relative?" B. Russell, MIND, July, 1901, p. 299.

translated into Time; but it is at least in one sense a downward translation. It is true no doubt that just as our nervous system could not work without a circulating blood and an intestinal canal, so we cannot conceive Change without what we now call Time. In fact the only categories we conceive to be independent of Time as of Motion are Matter and Space. But we do see that the nervous system is the highest organic development in our experience; and on an evolutionary basis we do not exalt the circulatory or digestive system into equality with it. There is an evolution of the categories also; but the one usually accepted reverses the facts.

Space itself is really one with Motion. They cannot be put asunder either sensibly or rationally. *We need a word which shall combine the two conceptions.* Then, when the conception of Motion-Space has found a word, we shall be able to translate this upwards into what we call the mental region: we shall see that all our 'psychological' figures (like our Time ones) are borrowed directly or indirectly from Space and Motion; and the term 'matter' will be reduced to its proper function of indicating content and resistance.[1] Whatever resists, whatever is contained, is the outcome of that ultimate dynamic order which in the last resort is the source of the static or at least its governing pre-supposition.

It follows that there is no such thing as an ultimate problem of Time, nor indeed even of Space: the only ultimate problem for us in this connexion is that of Change. For, after all, the successive can only be ultimately distinguished from the simultaneous as two modes of motion (*e.g.*, you strike two 'notes' successively or simultaneously), or as two modes of perception. If this view is the true one it results that our erection of Time into categorical equality with Space is due to what I would call monocular thinking; and Space would in binocular thought absorb Time, and thus enriched and so to speak ennobled, would develop into an enhanced conception of Motion. For in that case Motion itself acquires more value and content; or may be taken to symbolise the most inclusive concept possible to us, allying itself to that of 'energeia'. In other words, motion rises from being a sense-percept to the status of signficance or a consummate symbol of value. Of course we may prefer to say simply that Time is the one dimensional Space of the mind (which again is what we see in the Space-world as

[1] It will be remembered that the conception of inertia and rest are undergoing a similar transformation. 'Rest' indeed in its traditional and popular sense is a virtually superseded notion.

motion) translated into knowledge. It is the merely successive Space of Experience. It is true that there is succession in Space also. But this succession, as the artist knows, is nothing but the shortcoming which precludes our 'taking in' except in the painter's or sculptor's sense, the whole of any 'scene' together. It is all there simultaneously; but as we can only reach, so we can only see, the parts and not the whole, except indirectly or ideally. But for this disability we could at will not only dissolve a picture into its successive acts of painting or into its constituent factors (which by means of photography we can now do) but we could even hear a symphony or an oratorio in music as one transcendent Chord, and receive a poem in one comprehensive Word.

Of course it must not be forgotten that our vocabulary of 'physical' or 'material' terms is itself originally borrowed from that evolved by our own conscious activities: that the language of 'motion' and 'matter' is borrowed from 'mind'. And certainly no one refuses to admit that in this sense we translate the physical into the psychological; we impose our own character upon material phenomena. The difference is that in this case we borrow back the terms thus bestowed upon the physical world and describe our feelings and indirectly even our emotions in terms of the physical. But as we have seen, we do not borrow back the Time-terms derived from Space and enrich our conceptions of Space with them. Why is that impossible? Because, as we have also seen, they symbolise part of those very conceptions, including those of change and motion.

We have two immensities, one physiological, the other 'mental'. The one is Space, the other Eternity. What then is the Future—that Unknown and yet Inevitable on which we lay so much stress, towards which we are compelled to travel, and which can only be 'read' in guess, conjecture, inferential anticipation, or forecast—that of which the prediction can never be verified until it has become the Present? In one sense, as we have seen, it is the analogue of the environment beyond Touch of the blind man, or rather of the organism which has not yet developed the visual sense.

It is strange we should so often forget that everywhere the governing mind-metaphor, the metaphor of mind-activity, is Sight; all its analogies are those, first and foremost, of Vision. And even though this distinctively human function—the pioneer, the explorer of new worlds, the bringer of new

messages—be developed in the mental sense only so far as to give a vague awareness of 'light,' and shadowy suggestions of objects which we can only deal with as we say 'speculatively:' still it is sight, and depends upon light, "which lighteth every man . . .". And sight knows nothing of Time: only of Change and Motion.

Or we may, if we like, compare our 'present' to the sweep of our outlook from horizon to horizon, and the great mind's area of vision to the broad land- or sea-scape from a high mountain. But then the present moment must be seen as dimensional. It must give us the cube, the volume, the solid. It must be the true analogue of what from the highest vantage point attainable is the range and content of our bodily vision. The Future, then, to begin with, becomes that which is yet below a given horizon; if you will, the antipodes to the Present whereon we stand. But see what follows. For the Past, that is the world already explored by Man on his great journey through the life-country, has thus sunk below the horizon behind us; the Future is the world waiting for him, ready for the Columbus of the race, *the Copernicus of Time*. When that Time-Explorer appears he will know how to set forth on his voyage of exploration, and will bring us evidence that his discoveries are not conjectural nor fantastic. He will show that the prophet actually sees and gives us here and now, what the ordinary man merely predicts, foretells and guesses at, as far away; and that if we will learn to use his means and use them with his energy, we too may go forth into 'new continents' of Time and colonise the 'future' at our will.

V.—DISCUSSIONS.

MR. BRADLEY'S THEORY OF TRUTH.

A PHILOSOPHIC Rip van Winkle, if he awakened from a decade's hibernation, would no doubt be amazed at the change which has come over the surface of the philosophic world. Not only would he everywhere hear new topics familiarly discussed but he would find that all the positions taken up in Prof. James's *Will to Believe*, which were almost universally execrated in 1897, were almost universally conceded in 1907. Whence he might be tempted to infer that despite the assurances of dogmatic metaphysics that progress was impossible, philosophy had been progressing very rapidly: he would certainly be tempted to welcome and to quote Mr. Bradley's remarkable article in the last Number for signal examples of such progress. He might interpret many passages therein as meaning that Mr. Bradley was only waiting for Prof. James to give him a little encouragement and to disavow his disreputable *entourage* in order to capitulate gracefully and to declare that he himself had been a pragmatist, and even a humanist, all his life, and had only dissembled his affection for these modes of thinking from deference to the sacred memory of Hegel. Our philosophic Rip would naturally be ignorant that the article in No. 62 is in substance a rejoinder to replies which Mr. Bradley's article in No. 51 provoked in No. 52, so that he has evidently taken time enough to reflect deeply on the profound problems he discusses. But though personally I have much reason to regret that Mr. Bradley's ruminations were not published in time for my *Studies in Humanism* to profit by them, it must be admitted that they were worth waiting for. For though Mr. Bradley has been tardy, he has been explicit, to an extent he never was before, upon a number of most important questions. *A fortiori*, therefore, Mr. Bradley's views are worth discussing, and inasmuch as, though ostensibly addressed to Prof. James, they evidently contain also such reply to me as he judges it advisable to make, it seems my duty to take an early opportunity of discussing them.

At a first glance Mr. Bradley's concessions to the new philosophy seem very extensive, not to say decisive. But of course all Mr. Bradley's readers know how carefully it is necessary to distinguish

between appearance and reality. And so the imposing list which follows will need examination.

(1) Nothing at first sight could seem more explicit, than the rejection of the theory that it is the nature of Truth to 'copy' reality. Mr. Bradley not merely treats it with scorn, but really refutes it (pp. 166-173). It is consequently a shock to find (pp. 174-175) that nevertheless there are *four* senses in which truth may be said to correspond with reality, in ways which are at least verbally incongruous with the earlier doctrine.[1] And this arouses a suspicion that there may further be a fifth sense of 'correspondence' in which this notion may have to be (and may have been) predicated also of Mr. Bradley's own theory of truth.

(2) Still what is said on pages 174-175 should no doubt primarily be taken as explaining what Mr. Bradley meant, when he spoke as if he believed in the 'correspondence' theory. In so far as he meant this and no more, it appears that we all misunderstood him and owe him an apology, which would be redeemed from abjectness only by a recollection of the very misleading language he confessedly used and the time he has taken to mention the tenable senses of 'correspondence'.[2] For there was nothing in the context to lead any one to suspect that he was speaking "from a lower point of view" at which it was "convenient to speak of truth" in a way which is really nonsensical.

(3) Mr. Bradley now for the first time makes it quite plain that his Absolute is neither a superior sort of philosophic God, as many generations of Oxford undergraduates have been taught to believe, nor an all-absorbing, all-paralysing metaphysical monster, as I had feared. It is a precious boon to be told definitely (p. 179) that it is merely the perfectly harmless conception of a "totality of finite mind,"[3] and a great relief to have it admitted that Mr. Bradley does not "believe in any reality outside and apart from" this, and it is to be hoped that this revolutionary change, either in what Mr. Bradley's metaphysics mean or in what they have been taken to mean, will be properly appreciated.

(4) It is encouraging to find that the importance of Error to the theory of Truth is at last being recognised, and even more so to gather from the footnote on page 169 that Mr. Bradley perceives that a naïve 'realism,' which treats all knowledge as 'intuitive' and immediately valid, affords no refuge from pragmatism, for the reason that it utterly breaks down over the existence of Error.[4]

[1] It is not at all clear to my mind that some of the incongruities are not more than verbal.

[2] One might, strictly, contend also that the comment in *Studies in Humanism*, p. 118, was justified by the irrelevance of Mr. Bradley's four valid senses of 'correspondence' to that which had been impugned by Prof. Dewey.

[3] Why not "minds"?

[4] How entirely I agree with Mr. Bradley about this may be seen by comparing N.S. 62, pp. 247-248.

(5) The doctrine of "the suppression of the Subjective" at last condescends to give a reason for what has so long been insisted on as self-evident, *viz.*, the intellectualist devotion to 'pure thought'. It is true that this explanation (p. 174) is purely psychological, and (as Mr. Bradley himself remarks) applies to ethical and æsthetical as well as to logical values. In point of fact it applies to pleasure-values as well, and rests on the general fact that all our functions frequently interfere with each other. 'Theoretic' values are no exception. Occasions may arise when our highest cosmic become as inappropriate as our lowest personal interests and have to be as ruthlessly suppressed. It is difficult to believe, *e.g.*, that when Mr. Bradley wants to catch a train, he does not manage to suppress his 'ultimate doubts' about the metaphysical reality of Time. Hence, as stated here, the whole doctrine amounts merely to the innocuous truism that *whatever* "is irrelevant to and interferes with the process of truthseeking" must be suppressed. In other words, if you want to keep your cake, you must not eat it. Who ever thought of denying that? Who ever asserted that our desires could not conflict with each other? Why, the principle would be as fatal to indulgence in the purest mathematical thought as to the most selfishly subjective judgment, whenever either of them became obstacles to a greater good! But regarded as a contribution to the point at issue, the first thing this doctrine should do should be to suppress itself! For it is certainly itself an irrelevant reply to the contention that wishes and emotions are not always, necessarily and as such, irrelevant to the discovery of truth.

(6) That "in some sense thought depends on desire and will," that "in the end all truth has practical and again æsthetic consequences" and is useful and that "any idea which in any way works has in some sense truth," Mr. Bradley had admitted before.[1] These things have, apparently, always been known to be true, though for over two thousand years no true philosopher has deemed them worth a mention. Excellent! But in view of the obduracy of some intellectualisms it is well now to have them said again and again and again.

Now what do all these things mean? Do they mean that Rationalism is really giving ground and perceiving how irrational it has unwittingly been? One would fain think so, in the interests of philosophic concord. Nor can there be a task more repugnant to a sensitive soul than that of pointing out that even the most plastic Rationalism is made of stuff too stern and stiff to fit into the new moulds, and that so its concessions are largely unreal and not nearly sufficient to satisfy the just claims of pragmatic epistemology. Still if this duty has to be performed, it may well devolve upon one who has grown somewhat callous to being treated as the Whipping-Boy in Ordinary to Prof. James's ideas.

[1] No. 51, pp. 310, 319, 320, 322, 327, 333, etc.

As to (1) and (2); Mr. Bradley seems to have missed the main point of the pragmatic protest against the 'correspondence' or 'copy' view of truth. Pragmatism has not the slightest objection to conceiving (*some*) truths as 'correspondences' or 'copyings' or 'agreements,' provided that these processes remain strictly *immanent* in *human* knowing. The mere use of these words shows that there are cognitive relations which may be so described. Pragmatism, therefore, admits their existence freely; only it proceeds to explain them pragmatically, *i. e.*, as valuable and serviceable cross-references which obtain *within* our experience.[1]

The only 'copying' or 'corresponding' objected to is that in which one of the terms claims to *transcend human experience*.[2] And absolutism as hitherto propounded appears to involve *such* copying equally with realism. As for the four senses of correspondence enumerated on pages 174-175, pragmatists might accept them all, though they would insist on carefully explaining the first three. They are all four, however, irrelevant as replies to the pragmatist attack on the absolutist conception of the relation between human and 'absolute' truth.[3]

[1] *Cf.* James's Sixth Lowell Lecture in his new book on *Pragmatism* and *Studies in Humanism* pp. 122, 177, 425-426. James says (pp. 212-3): "To 'agree' in the widest sense with a reality, *can only mean to be guided either straight up to it or into its surroundings or to be put into such working touch with it as to handle either it or something connected with it better than if we disagreed.* . . . To copy a reality is, indeed, one way of agreeing with it, but it is far from being essential. The essential thing is the process of being guided." *Cf.* also his first and second Lectures.

[2] This objectionable form might perhaps be called the '*transcendent* correspondence'. Only it must be remembered, that 'transcendent' also is used ambiguously, and that in some senses it too is quite explicable pragmatically. The fact is that epistemological terminology has been extremely loose hitherto, and that it will not be rendered clear and exact without much effort.

[3] I cannot, therefore, agree with Mr. Bradley that the "one-sided intellectual" theory mentioned on p. 175 *s.f.* (= presumably the Hegelian or Greenite) is exempt from the charge of copying. Even verbally, 'repetition' and 'reproduction' seem mere variants of 'copying,' and a theory which is expressed in such terms at once provokes the question—"but is the 'repetition' or 'reproduction' *exact?*" More materially, it may be observed that even if "reality is an original system of thought which you try to rethink," a doubt as to the adequacy, and therefore as to the correctness, of the correspondence creeps in as soon as it is admitted that '*you*' are trying to *rethink* this wonderful reality. For if (*a*) it be assumed that absolute truth enters your soul bodily and without distortion, error ought at once to become impossible; if (*b*) this notion is disclaimed, it has to be shown that after the deductions and distortions incidental to the human process of 'rethinking,' *our version* of the absolute truth still corresponds correctly with its divine but transcendent exemplar. In all cases of this sort, therefore, there is 'correspondence,' though the 'correspondence' is not between truth and 'fact' but between *our* truth and 'absolute'. Thus the epistemological difficulties are in no wise diminished. See my *Studies*, p. 181.

As to (3); we have seen that the effect of Mr. Bradley's honest and noble reduction of the Absolute is to render it quite harmless. By this *bouleversement* Mr. Bradley's Absolute is made to coincide pretty nearly with Dr. McTaggart's, which latter has shown itself to be quite compatible with what is practically, though not in name, an extreme pluralism. We can only gasp, therefore, and applaud. But even to a moderate pluralist like myself, it would seem to follow that if truth is really as individualistic as stated on page 176, the phrasing of absolutism now needs a good deal of transposing into a minor key. It is indeed refreshing to hear that an Absolute Truth transcending finite truth is "a most stupendous misconception," and that even the "common" truth is "not wholly the same," but vitally dependent on individual differences. This should be ample to satisfy the most exacting individualist; but, alas, it is not enough for the pragmatist! For Mr. Bradley does not yet conceive this 'common' life and truth pragmatically; this "truth, the same in all" is still *presupposed* as pre-existent, instead of being treated as an achievement of intersubjective intercourse.

As to (5); Mr. Bradley neither proves that the processes called non-intellectual must *always* be irrelevant and harmful to cognition, nor admits that *if ever* truth-seeking is forwarded by them, the dogma of a pure and independent thought is overthrown.

As to (6); what is conceded is not enough; the evidence shows that thought and truth depend universally and essentially on 'will' and purpose, and this should be admitted emphatically at the outset, and not grudgingly "in the end".

Besides making these insufficient concessions Mr. Bradley unfortunately also raises certain objections and repeats certain ancient calumnies against pragmatism which show that he is not yet in the position to declare that he knew it all long ago.

Thus (1) he repeats (p. 168) the assertion that truth is conceived by pragmatism as an "external means" to practical success. It is hard to say what an "external means" means, and the assertion was one of nine or ten misinterpretations which he was challenged to explain or substantiate as soon as he made them.[1]

(2) He alleges, similarly, that pragmatism conceives knowledge, truth and reality as all 'external to the one real end and more or less independent of it' (p. 168). In any ordinary meaning of the words, nothing more baseless can well be imagined. The charge is so wild that the most cursory perusal of chapters vii. and xix. of *Studies in Humanism* would possibly convince Mr. Bradley himself that on this question at least we are substantially agreed.[2]

(3) Both the above misconceptions appear to arise from the assumption of a natural dualism between 'theory' and 'practice,'

[1] *Cf.* No. 52, p. 528; *Studies in Humanism*, p. 120.

[2] *Cf.* pp. 169-173 with *e.g.*, *Studies*, pp. 425-426, for evidence of even a close verbal parallelism.

and of a doctrine that 'will,' 'thought' and 'feeling' are 'aspects of reality,' so 'independent' that to emphasise one is necessarily to outrage the others. In consequence of this Mr. Bradley feels entitled to treat as one-sided exaggeration what is really a refusal to trichotomise the unity of the soul. He should have observed that I had from the first repudiated all this faculty-psychology and all its consequences.[1] It is moreover hard to understand how Mr. Bradley can *consistently* both censure the unification of these 'faculties' under the heading of 'will' or 'activity' and yet claim the right of reducing one of them to another. If 'will' is fundamentally distinct from 'thought,' how can it be merely 'the self-realisation of an idea'? Or, if unification is legitimate, why is it better to absorb 'will' and to finish up with a dualistic antithesis of 'thought' and 'feeling' than to conceive both of these as fundamentally 'active' or volitional?

(4) It may just be noted that Mr. Bradley still steadfastly declines to recognise the bearing of verification on the pragmatic claims to truth.[2]

(5) His remarks on pages 168 and 179-180 clearly show that he still erroneously conceives pragmatism not as an epistemological method but as a metaphysic.[3] Otherwise he would himself see that it must be to us irrelevant to ask whether the end was 'known or unknown'.[4] For whatever the end, the 'truth' of the means chosen to attain it is vindicated by success upon trial. It is not anything that can be excogitated *a priori* by reflection upon the relation of means and end in the abstract. Mr. Bradley's thought clearly has not entered at all into the trying and testing, the valuing and revaluing, which issues in our 'making of truth'. To refute the pragmatic doctrine he would have to show that no one ever devised or tried any means to any end.

(6) The inquiry as to what absolute or ultimate truth can mean for pragmatism may be answered simply by a reference.[5] But Mr. Bradley's treatment of the matter shows how far he still is from any genuine humanism. On pages 170-172 the old *depersonalising* of truth and the substitution of dehumanised abstractions for the concrete experiences are in full swing. Whereas to a humanist no truth could be absolute without satisfying the *whole* experience of whoever recognised it. It follows that in so far as A's experience was different from B's, A's 'absolute truth' would diverge from B's.[6] Thus even though 'absolute truth' was 'all-containing' and

[1] *Cf. Studies*, pp. 127-131. [2] *Cf.* N.S., No. 52, p. 529.

[3] *Cf. contra* James, *Pragmatism*, pp. 45-50, and *Studies*, essay i.

[4] This disjunction is equally surprising as a specimen of logic and of psychology. For surely we always have some foresight, however dim, of any end to which we seek means, and never know it as fully before as after attainment.

[5] *Studies*, essay viii.

[6] Though it need not therefore, *disagree* with it; indeed it is just the 'agreement' between A's truth and B's that renders it 'common'.

consistent, it might yet exist in the plural. All these shocking inferences seem to be easily developed out of his own admissions on page 176. If it is true that the 'common' truth is not quite literally *identical*[1] in all men and "must be taken none the less as modified in each case by its fresh context," how can the inference be resisted that A's 'modification' thereof must be 'in a sense' different from B's? And if so, would not Mr. Bradley also have to content himself with the pragmatic interpretation of the 'commonness,' *viz.*, as meaning nothing more (or less) than a basis for common action? At any rate he seems here to have honourably debarred himself from the usual subterfuge by which intellectualists evade the inquiry into the actual meaning of 'commonness'. As he no longer interprets the Absolute as an all-embracing thought postulated to conceal the failure of a facile theory of knowledge, he cannot take commonness for granted as meaning just the inclusion or absorption of finite in absolute thought. The commonness, therefore, is no longer *given;* it has to be *made*, by what is at best a legitimate abstraction. This no doubt quite coincides with the pragmatic view of the matter, but it does not seem certain that the coincidence would please Mr. Bradley.

(7) Suppose, however, that we granted the contention that there was an 'absolute' truth (in the old sense) and that 'the Truth' was strictly one (p. 170), should we not inevitably relapse into the most indefensible form of the 'correspondence' view?

If this suspicion proves to be well-founded, it will clearly follow that despite his struggles Mr. Bradley has *not* succeeded in disentangling himself from a theory he has himself refuted, that his own theory is void and vain, and that his pragmatist critics were quite right in attributing to him the (untenable) 'correspondence' view. And yet this is so plausible an interpretation to put upon his statements that I for one do not see what better alternative can be extracted from them.

It is admitted, to begin with, that there are only human knowers and that none of these know (or can know) the whole truth. Each of these perceives truth from his individual position and makes his individual 'modification'. Truth, therefore, so far, exists only in the plural, and these plural truths diverge, and often conflict. To unify and harmonise this afflicting plurality it is suggested that we must admit one absolute truth which alone can be fully true, and in which the many individual truths can converge and be absorbed, and so attain validity.

Now such truth, as Mr. Bradley has quite rightly observed, could not itself be regarded as copying reality; it would have *made* reality and have been merged in it. There could be no relation between these two ideal factors, and hence no copying.

The danger to his theory, however, arises from totally dif-

[1] In Mr. Bradley's sense, *i.e.*, *indiscernible*.

ferent quarters. For (*a*) this one and all-inclusive whole of Truth does not in fact exist; it is an ideal; and Mr. Bradley has apparently added that it cannot exist.[1] (*b*) The 'plural' truths, which do exist, are divergent and require to be harmonised. Hence (*c*) they must be related to each other; they must 'agree' or 'correspond' with each other. But since (*d*) this agreement is not to consist of the mutual accommodations of human truths, as pragmatism has impiously suggested, our truths have to be related *via* the absolute truth, which sets the standard to which they may all approximate to a greater or less extent, and whence they receive their title of 'truths'. It follows (*e*) that they themselves must also be related to the absolute truth. For they admittedly do not *make* it, as it makes reality.

Now about the relations of our truths *to each other* there is no intrinsic difficulty under (*c*), so long as the relations and their 'correspondences' remain immanent in human experience. The pinch comes (in (*d*) and (*e*)) when our truths are to be related to the absolute ideal. For the latter manifestly transcends *our* experience. If then our truths, to be 'true' and to be 'common' to individuals, must be related to the absolute truth which validates them, what else can they do but 'copy' it? And does not this relation, therefore, bring up the old *crux* in a new form? *Our* 'truth,' in order to become true, has still to transcend *our* experience. And even, it would now seem, *all* experience, seeing that there is no absolute experience to possess absolute truth.

What then is the difference between Mr. Bradley's 'absolute truth' and the absolute 'fact' of Realism? Apparently only this that whereas both are unknowable, the former is in addition non-existent and incapable of existence.[2] Now this may possibly be an advantage; for it may be urged that it is nonsense to try to 'copy' what does not exist. Hence a theory which involves a *non-existent* 'transcendent' is vastly superior to one which conceives it as existent. And there is less risk also that it will 'disagree' with your truth. Thus the charge of 'copying' may be rebutted by annihilating the original to be copied. As against these advantages, however, may perhaps be set the fact that the theory attains no truth at all until it has achieved a transcendent ideal to be copied, and that so far it has succeeded only in rendering truth impossible *ex vi definitionis*.

It is plain, therefore, even to an intelligence debased by banausic subservience to 'practical' considerations, that there is something theoretically wrong in all this. Indeed Mr. Bradley in the end

[1] It exists, of course, as a psychical fact, in every mind that accepts it as an ideal. But this manifestly does not unify it. A's 'absolute ideal' need not be identical with B's, and the question how we are to know whether or not it 'corresponds' with B's, at once precipitates us again into the old puzzle.

[2] Because it cannot be contained in a finite mind and no other exists.

seems in a sense to admit that this is somehow so. Only he modestly calls it a "difficulty,"[1] and no doubt an easy conversion of the principle χαλεπὰ τὰ καλὰ would enable one to appreciate the aesthetic value of difficulties. But for the sake of the weaker brethren will he not make it just a little easier to believe in 'absolute' truth? And above all will he not make it a little clearer how his theory can get on either with no truth at all or without a 'correspondence' between the absolute and the human views of truth?

F. C. S. Schiller.

[1] P. 173 *n.*; *cf. Studies*, p. 283.

A REPLY TO MR. MOORE.

In the April number of Mind, Mr. G. E. Moore has made "a short statement about chapter ii." of my *Essay on the Nature of Truth*. Although I am reluctant to write on this subject at present, I will try, out of respect for Mr. Moore, to answer his paper.

"Mr. Joachim," he remarks on page 230, "does not profess to be quite sure whether the main views he attacks are really held by Mr. Russell and me, or not; he says he *may* have misunderstood our words." The reasons for my hesitation are stated in § 12 of my book. It never occurred to me that Messrs. Moore and Russell had "used misleading language"; but I felt it a difficulty that (with regard to some points) they have used no language at all. When this difficulty is removed—and I gather from Mr. Moore's words[1] that he hopes before long to publish a systematic exposition of his views—Mr. Moore will find me ready, and even anxious, to be convinced. For most certainly I have formed no opinion that he is "dogmatic and unconvincing," although I freely confess that he has not yet convinced me.

Mr. Moore proceeds to formulate three propositions, which it will be safest to quote *verbatim*. They are:—

"I. That *some* facts are facts, and *some* truths true, which never have been, are not now, and never will be experienced *at all*, and which are not timelessly experienced either.

"II. That some of the facts and truths, which we do *sometimes* experience, are facts and are true, *not only* at the times at which they are experienced, but also *either* at times at which they are not experienced at all, *or else* timelessly; and that these facts and truths are not timelessly experienced either.

"III. That *precisely and numerically the same* fact or truth may at one time be experienced by me, when I am seeing the sea and am not seeing a house, and at another time be experienced by me, when I am not seeing the sea and am seeing a house; and that *precisely and numerically the same* fact or truth may be experienced by me, when I am seeing the sea and am not seeing a house, and may be experienced by another person, *e.g.*, by Mr. Joachim, when he is not seeing the sea and is seeing a house."

Mr. Moore maintains that, although I have not refuted any one

[1] Mind, p. 234, "although I hope some day to prove it".

of these propositions, my language is misleading unless I mean to deny all three. And he hopes to persuade me that the third proposition is true, or (as he modestly says) that "there is actually something to be said" in its favour (*cf.* MIND, p. 235).

Now I may say at once (1) that *with certain reservations* I do deny all three propositions; (2) that I thought—and still think—that I have refuted the substance expressed in them; and (3) that I do not think there is anything "to be said in favour of the third," if it be interpreted strictly and in the sense in which I deny it.

(1) I deny all three propositions; but I make certain reservations. These seem to me important, but it is impossible to state them adequately within the limits of this paper. I can only ask Mr. Moore to accept the following rough and imperfect sketch:—

(*a*) In the first place, then, my denial is made subject to a protest against one implication of Mr. Moore's method. For it is implied (is it not?) that I must *either* accept these propositions as absolutely true, *or* deny them as absolutely false. Mr. Moore is saying in effect "Give me a plain answer, Yes or No". But I contend, and have tried to establish in my book, that the subject-matter of Metaphysics does not admit this kind of treatment. The demand for a plain answer is sometimes effective in a court of law; but even there it is often inadequate to the complexity of the subject-matter. Even the rough and ready "truth of fact," which the cross-examination intends to elicit, may refuse to appear in the plain Yes and No of the witness's answer. And I suggest to Mr. Moore that a method, which is often too crude and too coarse to elicit what is roughly called "fact," is perhaps not suited to establish the truth in philosophy.

(*b*) In the second place, Mr. Moore assumes—or at least attributes to me—a severance between temporal and timeless experience, against which I have already protested, and must here protest again. Thus he says (MIND, p. 232) "With regard to the second proposition, on the other hand, Mr. Joachim seems to me to admit no more than that some of the facts and truths, which are known at a particular time by a particular individual, are facts and are true *not only* at that particular time. Here, therefore, I shall accuse him of holding that any such fact or truth, which is ever known at all, is *also* known *either* timelessly *or else* at every time at which it is a fact or is true." I have endeavoured in my book (*cf.*, *e.g.*, §§ 27-29) to guard myself against a misunderstanding of this kind: and I can only repeat that, on my view, there can be no facts and no truths which are not *eo ipso* timelessly experienced.

(*c*) Lastly, Mr. Moore's way of formulating his propositions suggests that there are *two* things or factors, *viz.* "truth" (or "fact") and "experience": and that whereas *he* holds that these two factors may be, but are not always, connected, *I* hold that they always are connected. But I tried in my book to maintain that there are not two things together with a relation, but one indis-

soluble whole, and that to be 'fact,' or to be 'truth,' is to be an indissoluble whole of this kind.

My denial of Mr. Moore's propositions would therefore be most simply expressed in the thesis "To be a 'truth' (or a 'fact') is to be an-object-for-a-mind or a-subject-apprehending-an-object".[1]

(2) It is not for me to decide whether I have refuted the substance of Mr. Moore's propositions or not. Neither Mr. Moore nor I are competent judges, for we are not unprejudiced critics. That Mr. Moore himself does not appear to be convinced, I sorrowfully admit: that he *ought* to be convinced, I do not venture to affirm. If a verdict is to be given, I am content myself to leave it to those who are not already committed, provided that they will read my book to the end and interpret it as a whole.

(3) I come now to the third proposition.[2] And first I must make a few remarks about "external relations".

Messrs. Moore and Russell maintain, as I understand, that the ultimate constituents of the Real are certain absolutely independent Simples and certain Relations. I have urged that a plurality of absolutely independent Simples cannot, even with the help of Relations, in any sense constitute a genuine unity. If two or more Simples come (or are) together, there is no genuine union, if they retain their simplicity and their independence. There is at most a coincidence. And I have argued that this difficulty is not overcome by the postulate of Relations which "relate" whilst leaving the *relata* absolutely independent. An "external relation" is, I can quite understand, a name for what the theory requires: but what the theory requires seems to me as contradictory as an "evil virtue" or a "round square". For if the relation really unites, and constitutes *one* in place of *two*, the *relata* thus united are *eo ipso* not absolutely independent Simples, but interdependent features of a whole. If, on the other hand, the relation is really "external," with the *two* there is now conjoined a *third:* but the *two* are no more genuinely *one* in virtue of the added *third*, than are the contents of a wastepaper-basket or of Mr. Moore's pocket.

To prevent misunderstanding, I hasten to add that on certain points here I am completely in the dark as to Mr. Moore's views. I do not know, *e.g.*, how he would deal with the *αἰσθητόν*—the par-

[1] I do not mean that the above thesis fully expresses the positive basis on which my denial is grounded. But it guards against one misinterpretation of my denial—a misinterpretation which Mr. Moore's formulation might suggest.

[2] In this connexion, I may be allowed to correct one of Dr. Schiller's mistakes. Twice in his *Studies in Humanism* (pp. 105-106 and 167-168) he quotes at some length from pp. 167-168 of my *Essay on the Nature of Truth*. The passage, which he quotes, sets forth a view *which I am there attacking:* but Dr. Schiller quotes it, with an air of triumph, as evidence that I myself hold the view in question. I am sorry that Dr. Schiller has been led astray; but I naturally assumed, in writing the passage, that it would be read in its context.

ticular which, in perception or in feeling, is "one" (or at least appears as "one") without either being, or appearing to be, "simple". There are, I should have thought, particulars *perceived* or *felt* as "ones" and as "wholes" (and yet not as "simple"), but most certainly not *perceived* or *felt* as a plurality of elements together with relations. Even the wastepaper-basket along with its contents is *perceived* as "one": but it is at least doubtful whether it is *first perceived* as many elements combined into a unity by relations of any kind, "external" or otherwise. And if Mr. Moore were to say "No, but in the end, or in reality, or for clear knowledge, every such *αἰσθητόν is* Many and Relations," he would neither have explained, nor have explained away, the sensible appearance of a non-relational unity.

Again, I do not know whether Mr. Moore holds that the "external relations" are absolutely independent of all the Simples, or not. If the terms are absolutely independent of the Relation, I presume that the Relation is absolutely independent of the terms. But—whatever we may think of terms related, yet absolutely independent of the relation—the conception of a *Relation which is absolutely independent of all terms* is so unpromising, that I will not attribute it to Mr. Moore without his express authorisation.

And lastly, I do not yet know whether Mr. Moore admits that his theory reduces the Universe to a collection of coincident Simples; nor whether, if he does admit this, he accepts it without dismay. I do not know whether he acquiesces in the abolition of all unity, except the unity of the Simples and the unity of conjoined coincidents; or whether he would maintain that some things, although not "simple," can neither be resolved into Simples and Relations, nor be put together out of Simples and Relations. And if he does maintain this, I do not know how he would reconcile it with his general position. Does he, in short, hold that *all* Relations are "external," and that *all* things can be reduced to Simples and such Relations? Or does he maintain merely that *some* Relations are "external," and that *some* things can be so reduced?

I have now endeavoured to explain the nature and extent of my hostility to "external relations," and I will return to Mr. Moore's third proposition. When in my book I rejected the conception of "external relations," I never for one moment denied that all elements, which co-exist, may be said in loose and popular language to be "externally related": nor did I dream of maintaining that all elements, which in any sense admit of being viewed together, must precisely in that sense be intelligibly coherent. Thus, my judgment that "A is B" co-exists with my seeing the sea and with my not seeing a house: and it also co-exists with a feeling of pleasure, with a mole on my cheek, and with a smoking chimney. And *if* my judgment does, to any degree and in any sense, fuse with my seeing the sea and with the mole on my cheek, then I agree that these three elements are

so far genuinely related. And *then* I maintain that, precisely *quâ* thus related, my judgment will differ from Mr. Moore's judgment that "A is B," made (let us suppose) under the inspiration of a toothache and the vision of a house. But if the judgment that "A is B" can be, and is, abstracted from some or all of these concomitants—*if*, in other words, they really are irrelevant to it—then just so far (I should maintain) we are in danger of confusion if we speak of the judgment as "related" to them, or of their coincidences with it as "*its* different relations". And the confusion is concealed, but not removed, by adding the term "external".

In the end, I admit—or rather, I maintain—that every difference in the Universe is vital to every other and to the unity of the whole. The Universe is a genuine whole, and for complete knowledge there is no element utterly unrelated or merely coincident. That which, to the limited view of Mr. Moore or myself, appears at first sight as merely coincident or as "externally related," is for ideally-complete experience intelligibly coherent, *i.e.*, fulfils *in the end* its determinate function within the one "significant whole".[1]

But Mr. Moore, in his third proposition, invites me to consider pluralities, which, *taken as they stand*, certainly are not genuine wholes, nor *thus* intelligibly-coherent.

His instances are the following (MIND, pp. 231, 235). Mr. Moore, body and mind, with all his thoughts, at Edinburgh: Mr. Joachim, body and mind, with all his thoughts, at Oxford. Mr. Moore, seeing the sea and not seeing a house, and condemning Mr. Joachim's opinions: Mr. Joachim, seeing a house and not seeing the sea, and condemning Mr. Moore's condemnation. Each of these is a coincidence of coexistent elements, which Mr. Moore selects out of the entirety of things, and groups together. If Mr. Moore desires it, let us by all means call each of these bundles of coincidents "one," and speak of its elements as "externally related". But each bundle is "one" or a "whole" by courtesy, or, at the most, in so far as its elements are associated in Mr. Moore's thought. It is hard to believe that Mr. Moore supposes the bundles to be, severally, *one* in any genuine sense. Yet, unless he does so, his third proposition seems to be irrelevant.

Finally, whilst expressing my sincere admiration for the lucidity of Mr. Moore's argument (p. 235) on *precise and numerical identity*, I must nevertheless own that I think he is mistaken. Let me try to explain. The note A, whether struck on this piano or on that, or now or yesterday, is *the same* note. But it is not "precisely and numerically the same," if that means—as I presume it does—*the same to the exclusion of all difference*. Similarly, Mr. Moore affirms

[1] I am obliged here to be brief, and I am aware that my words may easily be misunderstood. The reader, if he wishes to understand, will kindly interpret the above paragraph in the light of chapters iii. and iv. of my book.

the same thesis, which I deny. But, once more, the "sameness" does not exclude all difference and is therefore not a "precise and numerical identity". And the sameness expressed in these differents is not, as Mr. Moore's ingenious argument assumes, an element of identity persisting within each concrete different beside elements of difference. For I must emphatically repudiate the inference which he draws from my denial of his third proposition. To his dilemma (p. 235), *either* "precisely and numerically the same" *or* "not identical at all, but only exactly alike,"[1] the answer is (I submit) clear, and even obvious. The dilemma rests upon a disjunction which is not exhaustive. It assumes—and the assumption underlies the whole position of Messrs. Moore and Russell—that there is no identity except the abstract identity excluding difference, and that there is no Universal which is not itself merely another Particular.

It would be absurd (I venture to think) if, comparing the Mr. Moore of to-day with the Mr. Moore of ten years ago, I were to say, "*Either* there is within the two Mr. Moores an element precisely and numerically identical, *or* the two Mr. Moores are not the same, in any sense, but at most 'exactly alike'". Yet this, as it seems to me, is the kind of dilemma which Mr. Moore's argument puts before me.[2]

HAROLD H. JOACHIM.

[1] Mr. Moore does not explain what he means by "exact likeness". But his argument (if I have not misunderstood him) loses all point, unless that which is *exactly like* is also in no sense identical.

[2] It will be noticed that I have made no attempt to develop or to defend the conception of a concrete identity. The subject of identity is so vast and so difficult, that an adequate treatment in the present paper would in any case be impossible. Moreover (if I am to speak frankly) I am by no means confident that such a treatment—a treatment, which I should myself regard as adequate—lies within my powers. But I am not on that account prepared to embrace the abstract identity, which appears to satisfy Mr. Moore. Bread may be beyond my grasp, but I shall not *therefore* swallow a stone.

MR. BRADLEY ON TRUTH AND COPYING.

In a foot-note to his recent article "On Truth and Copying" Mr. F. H. Bradley expresses surprise that either in his *Principles of Logic* "or anywhere else" he should be understood as "advocating the copy-theory of truth". It is of some interest to students of logic to ascertain what Mr. Bradley's views on this matter were when he wrote the *Principles of Logic* and whether his recent article makes any advance upon them. In the *Principles* he devotes two chapters, the last in the book, to discussing the validity of inference. In stating the problem he says: "The validity of inference has two main senses. When we ask if a process of reasoning is correct, we may have in our mind two different questions. We might ask if in argument we possess a strict counterpart of the nature of things, if our mental operation truly represents any actual process. And this would be the first question. The second would ignore the correspondence with reality. It would content itself with asking if the premisses do logically prove the result" (p. 498). Later on he discusses this "first question" at length. "What shall we answer," he says, "when asked if our reasoning is true in reality, and valid of fact throughout all its process?" If truth be the ideal counterpart of fact, can we say that the process of our reasoning is truth? Can we venture to assert that our mental operations are the same with any actual process in things? Is the intellectual experiment the parallel of a movement in the real universe? Our reasoning, we know, does answer to the facts, but that is not enough. Can we call it the literal expression of those facts? Is reflexion the double of an outward change that shows feature for feature in an answering element?" (p. 521). Mr. Bradley thus runs through various forms of reasoning and decides against their validity on the ground that they have no "counterpart in the nature of things". In any case, he says, the "discursive nature of judgment and reasoning is fatal to their claim of copying existence. The process of inference can never be true, and the result can never represent the fact" (p. 526).

These extracts prove that at the time of writing the *Principles of Logic* Mr. Bradley held that validity depends on copying. His doctrine at that time was that human judgments and inferences are true or valid in so far as they represent, or literally express, or copy the nature of things, or reality, or fact. Now, what is his present doctrine? In the first pages of his article he rejects for

various reasons the whole notion that truth consists in copying. As a better way to settling the problem of truth he suggests that truth, knowledge and reality are not separate but identical. "Truth is the whole Universe realising itself in one aspect" (p. 172). The relation between the individual and the Universe is as follows: "The Universe is nowhere but in the lives of the individuals, and, whether as truth or otherwise, the Universe realises itself not at all except in their differences". Thus "my desire and my will to have truth is the will and the desire of the world to become truth in me. Truth is a mode of the self-realisation of myself and of the Universe in one" (p. 176).

How can these metaphysical doctrines be applied to the valuation of any human judgment? Obviously they cannot be applied at all. Mr. Bradley therefore has to distinguish two points of view, a higher and a lower. The latter merely consists in reinstating the copy-theory which he had repudiated so emphatically. "From a lower point of view it may be convenient to speak of truth as corresponding with reality and as even reproducing facts. In the first place the individual in truth-seeking must subject himself. . . . Secondly, in truth-seeking the individual . . . must follow the object" (p. 174). As it is only a few metaphysicians who rise at rare intervals to the higher or metaphysical point of view, while the immense majority of men remain permanently at the lower point of view, it is a pity that Mr. Bradley is not more explicit about it. At the end of the *Principles of Logic* he says that, though validity depends on copying, he is certain that the object copied is *not* the series of "phenomena presented by simple observation". Both there and in his recent article he gives us no philosophical explanation as to what the object is which is copied, how we copy it, and how closely we must copy it to attain truth or validity.

Now for the point of general scientific interest involved in this controversy: it concerns the explanatory power of a philosophy which, like Mr. Bradley's, is absolutist, *i.e.*, views things from the stand-point of the Absolute (not of the person), and is intellectualist, *i.e.*, does not take due account of the volitional factor in our experience. His treatment of this matter of Truth seems to me a good example of the incapacity of such a philosophy to contribute to the solution of the elementary problems of knowledge. He offers us alternatively either a higher, cosmic point of view which, whether true or false, has no bearing whatever upon the theory of actual knowledge, or a lower point of view which is the copy-theory of truth which every one sees to be inadequate. I have elsewhere criticised his doctrine of judgment, inference, truth and the rest, set forth in the *Principles of Logic*, as ignoring the purposive and selective character of the human mind: in his recent article he shows no substantial advance upon his earlier position.

HENRY STURT.

VI.—CRITICAL NOTICES.

The Philosophy of Religion. By Dr. Harald Höffding, translated from the German Edition by B. E. Meyer. London: Macmillan & Co., 1906. Pp. viii, 410. Price 12s. net.

This able and important book may be viewed as summing up the intellectual labour spent by Prof. Höffding, during many years, on the central problems of human life. It exhibits clear traces of the stadia through which he passed to his present position; and thus, to one who reads between the lines, possesses something of the interest that attaches to autobiography. As he himself has told us, the poles between which his mind has oscillated in its forward movement are Sören Kierkegaard's doctrine of personality and the Positivism of France and England. If Kierkegaard drew him away from the traditional orthodoxy in which he had been bred, a growing consciousness of the reality and significance of science, combined with the study of Greek thought, sufficed to convince him that all positive religious dogma must be discarded, if the human mind is to enjoy its native freedom and independence, and to view the world with wide, synoptic eyes. Later, the influence of Spinoza bulked largely in the shaping of his philosophy. We can trace that influence recognisably enough in the conviction, to which Höffding gives expression repeatedly in the work before us, that even that which is highest and noblest in the world of spirit is subject to the laws of a vast natural order—which laws it is the function of science to discover—and that it is no dishonour, but rather a gain, for the ideal thus to have its roots firmly planted in the fundamental soil and structure of reality. It is important that the student of the present volume should also recall the purely experiential character of psychology and ethics, as Höffding conceives them; his previous results in these regions being in part determined by the abstraction on which he insists from all presuppositions of a speculative or religious kind.

Höffding's conception of religion is strongly voluntarist in character. The significance of ideas, he tells us, is quite secondary. "The word 'religion' stands in the main for a psychical state in which feeling and need, fear and hope, enthusiasm and surrender play a greater part than do meditation and inquiry, and in which intuition and imagination have the mastery over investigation and

reflexion." What strikes the reader at once is that inferences drawn from this definition will have to be carefully guarded, if they are not to end practically in the conclusion that religious faith is believing that to be true which accords with our permanently strongest wishes. And I can only say that the argument which follows does a good deal less than one had hoped for to negative this conclusion in advance. So far from any assistance being offered to the man who inquires whether the utterances of the religious consciousness are true, at all events in essence, it is even doubtful whether Prof. Höffding would understand the question, and it is tolerably certain that he would disallow its validity. Religious ideas, or some of them, he would say, are true in the sense in which the *Antigone*, or *Macbeth*, is true; but they are true in no other sense. "If religious ideas are to have any significance at all, it can only be in serving as symbolical expressions for the feeling, the aspirations, and the wishes of men in their struggle for existence." "I myself occupy a standpoint from which the fact that the poetic form is the only possible one is a sign that we are in the presence of the highest." "Great spiritual freedom and force will be requisite before we can base life on the conviction that our highest ideas are but figurative expressions. Hitherto the conditions for the development of this capacity have not been propitious, but who shall dare to set a limit to the freedom and power which may yet be developed by the human race?" In a word, the ideas with which faith operates are only the poetry of life.

As to this point of view, which is of course far from novel, one can only say that it is really external and unsympathetic. Religious men are often twitted with faith's indifference to truth; hereafter, if they care, they may borrow arguments from Höffding to prove that the truth of theological doctrines is irrelevant. I do not myself see what is meant by saying that "God is love" is symbolical; though I can understand the statement that it is true or false. Apart from this, however, Höffding's position is obviously rather antiquated, in so far as it implies that religion is no original, ultimately valid factor in human experience. It is not an ultimate thing at all; it is only a special department of æsthetic feeling. The best recent thought, we may surely affirm, has tended to take the situation more seriously. Again, will any one say that the religious consciousness would recognise itself under Prof. Höffding's description? Take the formula that religious ideas only express the wishes of men in their struggle for existence, and apply it to Luther's great words, *Wenn ich nur Dich habe, so frage ich nichts nach Himmel und Erde;* and how obvious, how trivial, its inadequacy appears! There may be stages of religious life which Höffding's quasi-utilitarian conception of the specifically religious attitude can be made to fit, although personally I should be inclined to question it; but at all events it is sheerly inapplicable to what happens on the level of the higher piety. And if any one

object to the epithet "quasi-utilitarian," and point to the term "aspiration" in the extract given above in support of his objection, I should reply that every idea of religion which, like Prof. Höffding's, centres in man, instead of God, denotes by the nature of the case an interested and utilitarian thing; and that only when its determining centre of gravity lies outside of ourselves, and it is interpreted as self-surrender to an infinite object, is religion free of that mercenary quality which may cling even to an austere moralism. Religion for religion's sake, or rather for God's sake, is the motto, always and everywhere, of genuine piety; and the thinker who defines it to himself, on philosophical grounds, as the poetic way in which man accommodates himself to the hardships of ethical, social, or physical life, is simply at cross-purposes with his subject.

The general import of Prof. Höffding's argument is as follows. First comes an epistemological section, designed to prove that religion does not spring from impulses of a purely intellectual nature, and is not meant to furnish a scientific interpretation of existence. Hence, if religious ideas are to possess permanent value, it must be in virtue of their capacity to express, in a figurative and emotional way, other sides of the soul's life than those of which theoretical science takes account. Religion, indeed, is concerned not with the comprehension, but with the valuation of life. To adapt a quotation employed in this section, what we gain from religious philosophy is not so much answers to questions universally put by common sense, as rather the knowledge that such questions, as being founded on erroneous presuppositions, vanish altogether on closer scrutiny. The core, the fundamental axiom of religion—and here we have the main organising idea of Prof. Höffding's book—is the conservation of value, "the conviction that no value perishes out of the world". On this there follows a disproportionately long psychological section—containing, however, several noteworthy discussions which would not usually be classed under psychology—in which the mental side of religion is investigated. The distinctive mark of religious experience, it is held, is its having to do with the relation of value and reality. Other aspects of experience deal either only with values or only with reality; but religion, so to speak, throws a bridge over the ugly black ditch between the two, by its faith in an ultimate harmony between our ideals and the nature of things. The problem thus solved by the religious consciousness is one that recurs in ever-changing shapes, for our conviction of fundamental unison between ourselves and the universe at large necessarily passes through periods of tension and difficulty; indeed it is a problem which would remain on our hands even though—as may yet happen—positive religion were eventually to disappear, and the term "religion" itself to drop out of human speech. Two types of historical religion are examined in respect to the varied illustra-

tion they supply of the axiom that all value is conserved. According to the one type, the supreme value is always really present, though hidden from us by the motley multiplicity and perpetual flux of the empirical world; Buddhism, Platonism, and the system of Spinoza being named as specimens. According to the other, the supremely valuable only maintains itself by means of a lasting conflict with hostile forces, as well as by passing through an evolution in time; and of this species Parseeism and Christianity are examples. Finally, in a comparatively brief ethical section, an inquiry is held into the value of religion itself. Since, in Prof. Höffding's view, ethics is an investigation as to the principles which regulate the discovery and production of values, and religion is faith in the preservation of value; it follows that religion has value as a presupposition of the ethical conduct of life. Not as an essential presupposition, however; it helps men to be good, and gives elevation and horizon to their goodness, but they can be good without it. Consequently, while the extinction of religion would not entail the utter moral pauperisation of mankind, it would mean a considerable fall in the funds of life; we cannot therefore contemplate its disappearance with equanimity unless we are sustained by the knowledge that a new and equivalent form of spiritual experience has been prepared to take its place. Nevertheless, the question whether this is possible ought not to be answered in dogmatic fashion. All we can say is that the odds are slightly in its favour. He that can receive it, let him receive it.

It is obvious that the chief question for a reviewer of this book is the significance and truth of Prof. Höffding's central, and ever-recurring, principle, that religion is definable as faith in the conservation of value. Presumably, this is meant as a definition of the constant factor in all varying historical faiths; in the language of arithmetic, it is the greatest common measure of the known religions of the world. That is to say, apparently, our definition of religion might quite well be the same, even if we thought Christianity away; since as each faith counts for one, and none for more than one, it is improbable that the diminution merely by one of the factors for which the greatest common measure is sought would affect the result seriously. In truth, however, such a blank general residuum is so utterly abstract that it gives intelligence no help whatever in comprehending the forms in which the religious consciousness has actually expressed itself in the past. It affords as little aid in interpreting facts as a colourless idea of race or nationality, got by abstraction from the specific features of all known races, would afford the historical student. In such conceptions there is nothing to organise, or interpret teleologically, the manifold data of experience; in the case before us, for example, no light is shed, by the definition from which we start, upon the emergence of the all-important distinction between ethical and natural religions; for the general term "value" has a generous

and indiscriminate largeness which welcomes Shintoism and Neoplatonism alike into its ample bosom. The truth is, there are differences of value among values; and to recognise them in the historical forms of religion we must adopt (even though it be unconsciously) the point of view of the highest religion we know. But in that case, again, the idea of religion we are, or ought to be, interested in, is no featureless generality, but an organic, normative idea, based on religion as we know it at its highest, and functioning in our mind as a guiding principle which enables us to mark the slow, tentative approaches made to it by the faiths given in history.

Another immensely important question is whether Prof. Höffding has any ground in reason to offer for the truth of what, in his view, is the basal ontological postulate of religion, the conviction that we and the universe are, at bottom, in harmony. Such a harmony is, undoubtedly, a vast good; it is possibly even the highest conceivable good; has Höffding any substantial ground for thinking that it is capable of realisation, or that ultimate Existence is such that it is being, or will be, realised? It does not appear that he has; or rather we may perhaps put it more strongly, and say that his epistemological principles, by the chasm they fix between what Lotze calls the world of values and the world of forms, render every theory of their higher unison *ex hypothesi* incredible. The value-series in the mind, moving always within itself, admits only of computations and comparisons whose subjectivity is scarcely denied; the real or objective series of events and things is equally self-enclosed. I am not now going to outline an argument for the credibility of Revelation; but at least I may point out the formal superiority of the position taken by those who believe that a true Revelation has been given to that which Prof. Höffding recommends. They share Prof. Höffding's conviction "that no value perishes out of the world," but they do so because they hold—whether rightly or wrongly—that in the character of Supreme Reality, as it has disclosed itself, there is an active, substantial basis for the rationality and righteousness of the universe. Their conclusion has at least premisses behind it. I cannot see that Prof. Höffding has any other ground for *his* faith than the vague impression, somehow engendered in the mind, that the future will prove that not one of the objections urged against his principle really has anything in it.

Höffding's theistic readers will of course protest that, on the terms allowed by this book, all the factors of personal fellowship between the Infinite and the finite spirit have simply been emptied out of religion; and that, to use his own terminology, without new psychical equivalents being provided. One may accept cordially enough the axiom of the preservation of value, as at least pertaining to religious faith, whether constitutive of it or not; but suppose one adds that the highest value of which one can conceive is

personal communion with a God of holiness and love, what then? Höffding has replied to this elsewhere by saying that anyhow it is because men believe the Divine to be the guardian of all they count precious, that they go on to affirm the existence of God (or gods). To posit value, that is, is the primary thing; to posit a Protector of value is purely secondary, and, with time, may be even found to be superfluous. I do not wish to be disrespecttul to a great master of philosophical discussion, but I cannot refrain from saying that this strikes me, somehow, as the eccentric suggestion of an outsider. Is that an inconceivable mood of mind in which the believer affirms that, far above all His gifts, he longs for God Himself; that God, and God only, is his chiefest joy? On the contrary, is not the religious literature of the world there to prove that this is the distinctive temper of religion in its highest form, of faith most perfect because most selfless? It is really only another side of the same fundamental objection when we urge that Prof. Höffding's ambiguous attitude on the subject of immortality appears to remove his exegesis of the characteristic axiom of religion, that value is preserved, out of all real contact with the needs and utterances of the religious mind. With the best will in the world, I cannot see where value can reside except in the experience of conscious beings. It is true, the reader of this book finds it difficult now and then to determine whether, in Prof. Höffding's view, all value persists eternally, or only some value; his discussion of pessimism, for instance, as a view of the universe which has a real claim to be called religious, fixes this doubt more firmly in one's mind. But unless immortality of a personal kind is real, it is hard to comprehend how any value at all can ultimately persist; since the manner in which Prof. Höffding systematically ignores the theistic solution (neither "God" nor "Immortality" occurs in the Index) cuts him off from the argument, which another thinker might have employed, that an eternally existent Deity might derive some ultimate gain from the contemplation of human life, value thus surviving in *His* experience, though not in ours. It may of course be replied that Prof. Höffding has his own idea of God, and is prepared to define Him as "the principle of the conservation of value" (p. 384); but this really amounts to no more than the formal reduplication of a philosophical ideal, already sufficiently determined quite apart from the name God; while it is certainly to impose a connotation upon the term "God" which would not be recognised by the religious mind, at least in its classical representatives. Moreover, no use is made in the general argument of a conception of Ultimate Reality which in the least differentiates it from phenomena, or would entitle us to ask religious faith to accept it as only a better expression of its inmost sense of God, or as justifying prayer.

In general I have felt that Prof. Höffding does less than justice to religion, mainly because he sacrifices it to ethics, or even, one is occasionally tempted to say, to æsthetics. It is strange, merely

from the historical point of view, that a measured and elaborate treatment of the whole phenomenon of religion, as it has lived in the world and moved it, should contain no examination of the self-consciousness of the Founder of Christianity, or the echo of that self-consciousness which still persists so widely in humanity. Nevertheless Höffding's presentation of his own point of view has many varied and substantial merits. It is thoroughly readable, it is a veritable storehouse of religious psychology, and its diffused spirit of candour and impartiality lend it an extremely attractive air. The translation, at second-hand from the German, is entirely successful.

H. R. Mackintosh.

Idola Theatri, a Criticism of Oxford Thought and Thinkers. By Henry Sturt. London: Macmillan & Co., 1906. Pp. xvi, 344. Price 10s. net.

The scope of Mr. Sturt's volume is excellently indicated by its title. His main contention is that an examination of the type of Philosophy which has now been current in Oxford for a generation reveals a great fundamental flaw, *viz.*, the neglect of the "kinetic and dynamic" character of all human experience. From this one root of evil spring three further unwholesome developments, subjectivism, absolutism, intellectualism, all of which may in varying degrees be detected in the most famous and characteristic writings of our recent Oxford philosophers. The authors whom Mr. Sturt selects for special examination as representative of the tendencies he opposes are three, Prof. Green, Mr. Bradley and Prof. Bosanquet, all of whom, but more particularly Mr. Bradley, come in for a great deal of detailed criticism. One might perhaps be inclined to think that there are one or two other philosophers whose influence upon the growth of Oxford Idealism should have led to their inclusion in the attack, notably the Master of Balliol and the late Prof. Wallace, but it may be that Mr. Sturt regards their work as having been mainly of the nature of exegesis and elucidation of German Idealism and passes them over on that account. It must at once be admitted that the general tone of Mr. Sturt's criticisms is throughout admirable. There is little or nothing in his pages of the forced facetiousness which has marked some recent manifestoes emanating from the philosophical camp to which he clearly belongs, and if there is a little preliminary blowing of trumpets about the "new philosophical movement" and the stir which it has made in the world, it is all got comfortably over in a few opening sentences, while the tone of the author's detailed examination of his opponents and their German predecessors is habitually modest and candid. His own views are put forward without any disagreeable air of "cocksureness," he always makes a serious, if not always a successful, attempt to discover the real

meaning of the views he attacks, and he is careful to accompany his strictures even on the objects of his special aversion, such as Hegel, by a candid admission of what he regards as real merits. At the same time I cannot help feeling that the upshot of the whole inquiry is, to use one of the author's favourite words, not quite "satisfactory". Not that I regard Mr. Sturt's work as inopportune, or his strictures as too rigorous. On the contrary, I, for one, would frankly own to a conviction which must, I conceive, be shared by most of my Oxford contemporaries, that there is something seriously amiss with the foundations of the philosophic belief in which we were brought up, and I should regard the unsparing exposure of the sources of the error with genuine gratitude. My grievance, if I have one, is, in fact, that Mr. Sturt's exposure does not impress me as being thorough enough. For the proper execution of the task which he has set himself it is before all things necessary that the critic should be perfectly clear about his own position on the main issues at stake, and equally clear about that of his opponents. I cannot say that I am at all confident that Mr. Sturt altogether satisfies either of these requirements. There seems, to one reader at least, to be a fatal vacillation in his utterances on certain very ultimate problems which lie at the root of the whole discussion. Thus I, for one, am quite uncertain what view Mr. Sturt finally holds on the all-important question whether or not a proposition can be made true by our believing it. There are certain signs in his book that he is not quite prepared to go the whole way towards this conclusion with his friend Mr. Schiller, but it is very hard to understand just how far he does mean to go, and why, having started on the journey, he stops anywhere short of the terminus. It is ominous of his inclinations in the matter that he more than once denounces vigorously the very proposal to separate the study of Logic from Psychology and that he entertains for Formal Logic a contempt which he makes no attempt to hide. Now a writer who declares that Logic ought to be founded on Psychology is in fact saying that what we ought to believe as true can be ascertained simply by an inquiry into what we do actually believe, and from this position the advance to the conclusion that a proposition may acquire the right to be believed by the mere fact of being actually believed, by a sort of "prescription," seems an inevitable and obvious step. It would be, by the way, an interesting question in what direction Mr. Sturt's purely logical studies, from which he has returned with so vivid an impression of the emptiness of any Logic other than a mere disguised Psychology of Cognition, may have lain. From internal evidence I should conjecture that his conceptions have been chiefly based on Hamilton's and Thomson's feeble and superficial attempts to extend the range of the traditional syllogism, and, if so, his disrespectful utterances are certainly both intelligible and excusable. Of any knowledge of the character or achievements of the really scientific Logic of the last half-century

as it has developed from its foundation by Boole and De Morgan into the propositional calculus and the calculus of relations, his book displays no single trace, and it is only this manifest unconsciousness of the facts which redeems his supercilious disregard of the most thorough of all scientific disciplines from the charge of impertinence. Before Mr. Sturt brings a second "railing accusation" against modern exact Logic on the score of barrenness I should seriously recommend him to examine some such example of its power as Frege's *Grundgesetze der Arithmetik*, in the Preface to which he will, by the way, find some very relevant observations upon the consequences of grounding Logic on Psychology.

The most striking expression of Mr. Sturt's psychologising tendencies, however, is found in his complete confusion between *truth* and the *knowledge* of truth. He seriously tells us that before a proposition can be considered in respect of its truth or falsehood there is a prior question as to its *interest* for us, and he goes on, in the course of his onslaught upon Intellectualism, to contend that the intellectualist philosopher deprives himself of all right to be interested in the extension of knowledge. Now it is, of course, true that we do not in fact inquire whether a given statement is true or not unless we feel some interest in raising the question; apart from such interest it would not occur to us to formulate the proposition at all. But it is quite another thing to maintain that a statement actually becomes true only when some one has felt an interest in knowing whether it is true or not, and ceases to be true when it ceases to be of interest to some actual man. And similarly, when once you draw the proper distinction between truth and the knowing of truth, it becomes a paradox to maintain that the intellectualist can have no motive for scientific inquiry; the motive lies obviously in his interest in finding out what statements are *true*. An inquiry is, no doubt, usually prompted by a plurality of motives, utilitarian and ethical as well as purely intellectual, but the purely intellectual motive of ascertaining truth is sufficient by itself.

A similar criticism might be passed on the inferences drawn by the author from the essentially "active" character of cognition. Mr. Sturt appears to hold that you can confront the philosopher with the alternative, either the process of knowledge is wholly passive or truth is something which we do not find but make, much as we make chairs and tables out of logs of timber. But the disjunction appears to me thoroughly fallacious. Granting the presence of construction in every process of arriving at truth, it does not in the least follow that the result of the construction is not the recognition of certain things as having been true all along, though we were not in a position to cognise their truth before our construction was made. Because getting to know truth involves activity it does not follow that the truth known is made by the activity, any more than it follows that because the climbing of a mountain is an activity the summit of the Matterhorn must have

been made by the first party who climbed it. Indeed, the whole point of our inquiry, Is this true? would be lost, and truth would become a purely arbitrary matter if it were really something which is manufactured by the process of discovery. Or does any one really believe that Euclid's forty-seventh proposition began to be true when Euclid devised the "construction" by which he proves it? That Mr. Sturt himself does not feel quite easy in his mind on the point may perhaps be inferred from the little fact that his favourite objection to the positions of his opponents is not that they are erroneous but that they are "unsatisfactory," an ambiguous expression which might imply falsehood, but again might mean no more than that they are not what Mr. Sturt would like to believe.

I seem to find a similar half-heartedness in the account of purposive activity itself. True propositions, the author appears to hold, are those to which we are conducted in the devising of means for the execution of our purposes. But such a definition would obviously be too wide as it stands. A purpose may be such that means towards its execution could only be devised if some condition were fulfilled about which we know that it is not and cannot be fulfilled. So Mr. Sturt, once at least, falls back on the consideration that the purpose to which truth is to be relative must be a "reasonable plan". But, now, how do reasonable plans differ from those which are unreasonable, or even insane? Precisely by recognising and adapting themselves to conditions independent of our volition which we do not make but accept. And thus it is implied in the very conception of a reasonable plan that there are certain ultimate truths which are, so to say, the alternatives under which all our decisions have to be made, and consequently do not owe their character as truths to any devising on our part. Not to mention that the very same implication arises in the notion of a process by which we are conducted from the thought of the plan to the thought of the particular steps to be taken for its execution. How "conducted"? By any mental process of association you please? Then anything may be a means to the accomplishment of anything, and truth once more turns out to be arbitrary. Or by laws of logical interdependence between propositions? Then these laws at least are not of our own devising or selecting. We devise and select under them, but we do not select them, at our sweet will, from an indefinite multiplicity of conflicting alternatives.

It is also a little surprising that Mr. Sturt does not seem aware of the curious consequences which his doctrine would suggest in the realms of Ethics and Religion themselves. Must not the Ethics to which thorough-going acceptance of the notions of activity as valuable merely because it is activity and of truth and good as manufactured products leads be one of the glorification of unqualified self-will? And as for Religion, has Mr. Sturt ever seriously perpended the issues raised by Leslie Stephen's essay on 'Religion as a Fine Art'?

I find something of the same want of clearness in the author's view of the position of at least one of his antagonists.

In the opening chapters of the book Mr. Bradley figures, among other philosophers, as an example of the ruinous consequences of a one-sided interest in cognition to the exclusion of the non-intellectual aspects of mental life. Later on we discover that the special peculiarity of Mr. Bradley's philosophy is that it opposes an Absolutism of feeling to the intellectual Absolutism and Panlogism of Hegel and his genuine disciples, and in the end we are even told that Mr. Bradley ranks among a rather motley crew of distinguished writers as being, above all things, a "prophet of the flesh". It may, of course, be said that this vacillation in the critic's point of view is really due to an ambiguity in the attitude of the criticised, or that Mr. Bradley has himself changed his position in the course of his philosophical development, and I am far from denying that there is truth in the rejoinder. But when we consider the prominence of a certain mystical element even in Mr. Bradley's earliest work, it would seem probable that it was an error to have selected him as a typical "Intellectualist" at all, and I should be inclined to account for the selection, at least in part, by the author's unwillingness to let off a distinguished "Absolutist" on any count of the indictment, and a feeling, which finds expression also in his chapter on Hegel himself, that any stick is good enough to beat the Absolute with.

Coming to the consideration of Mr. Sturt's specific charges against the Oxford philosophers, I feel personally that his case is best made out on the count of subjectivism, and that he is perhaps least successful in dealing with the charge of exclusive Intellectualism. It is perhaps impossible to deny the truth of the complaint made by Mr. Hobhouse against the succession of Oxford idealists that they accept subjectivism in their premisses to reject it again in their conclusions. But I cannot feel that Mr. Sturt is the right person to bring this accusation, or that he has really laid bare the source of the subjectivist tendency in his opponents. His own doctrine of construction as the essence of truth, if consistently developed, ought to lead to subjectivist results far out-doing any of those to which he takes exception. This appears very strikingly in his criticism of T. H. Green. If all knowledge is knowledge of relations, and relations are the "work of the mind," something literally made by the knower and put by him into objects, the objective validity of knowledge, to be sure, disappears. But how does the obnoxious doctrine differ in principle from the very theory of the "Pragmatist" critic that truth is somehow made at the will of the mind which knows it? So far as I can see, the subjectivism which no rhetorical ingenuity can eliminate from the works of our Oxford thinkers arises in the end from their failure to distinguish truth from the knowledge of truth, and it is precisely this confusion which Mr. Sturt and his friends erect into a fundamental principle.

The attack on "Absolutism," on the other hand, appears to me only half successful. Mr. Sturt seems to me right in defending the concept of relation against criticisms based upon the argument from the indefinite regress, though the recognition that an infinite regress is not necessarily vicious has to be won, so far as I can see, by logical inquiries of a kind to which he pays no regard and of which he appears to speak with a great deal of unjustifiable disrespect. Mere rhetorical appeals to common sense are a very inadequate substitute for such a rigorous analysis as is indispensable wherever our thought is confronted by concepts so hard to familiarise ourselves with as that of infinity. Under the head of such rhetorical common-places I am afraid we shall have to include Mr. Sturt's favourite appeal to the "kinetic" and "dynamic" character of experience as in itself a refutation of all theories of the Absolute. The real question is not whether change and becoming are features of the actual world, but how change itself requires to be conceived. Mr. Sturt, I imagine, probably contents himself with taking the motion of a "state of change" as something obviously intelligible without any further logical analysis. But it may at least be doubted whether change is not a complex conception which requires very careful analysis, and whether such analysis would not conduct us to a theory in which change and becoming themselves would appear as elements in what Mr. Sturt would call a "statical" view of the world. The whole problem, in fact, so far from being a simple matter, presupposes a searching investigation into the nature of continuity, a subject upon which common sense is useless as a guide. Nor do I feel, in view of the unqualified individualism to which Mr. Sturt's principles ought to lead and which is ominously hinted at in some of his attacks on the Ethics of "my station and its duties," that he is on very safe ground in denouncing Absolutism for its Ethical and religious corollaries. His is one of the cases contemplated by the proverb about those who live in glass houses. It is perhaps true that Hegel and the Mr. Bradley of certain parts of *Ethical Studies* come dangerously near to the doctrine that "whatever is, is right," but there are numerous utterances of their critic which seem to me to come no less near to the equally dangerous maxim "fais ce que voudras".

As to the whole notion of an Absolute a distinction must surely be drawn which Mr. Sturt's polemic overlooks. You may mean by an Absolute, so it seems to me, an object of knowledge and thought which is freed from all intermixture of subjective illusion, or you may mean one which is freed from every element of relation, and it would seem to make all the difference to ethics and religion which of the two you mean. Most of Mr. Sturt's arguments from consequences seem to me to be valid only against an Absolute expressly conceived, like that of Mr. Bradley, as excluding all relation, though they appear at the same time to be meant by the author to reckon as objections to the recognition

of any ultimately real object of thought which is recognised and not, in a literal sense, constructed. Now such an object, I take it, is as much demanded by Mr. Sturt's own theory as by any other. If the purposive activity of which he has so much to say is to be understood as identical with what we actually experience in ourselves in the moral and social life, it cannot be an activity carried on in a vacuum, a production of the world out of our own bowels; it must mean response to definite situations not created by ourselves. The active personalities and the material on which they react must thus constitute a reality which is in the last resort given to volition and not made by it. Whether this reality is then to be called an Absolute or known by some other name seems to me a very trifling question of words. I am the more anxious to note this because there is much in the tendency of the author to insist upon the reality of human freedom and the significance of the teleological categories of personal life for our final interpretation of the Universe with which I find myself in hearty sympathy.

To sum up, I would repeat that I, for one, feel no grudge against Mr. Sturt for his iconoclastic attack on the distinguished men from whom my first ideas in philosophy, like his own, were derived. "Whoso loveth his God," as Nietzsche says, "chasteneth him," and it should be those of us who are most conscious of what we owe to our teachers who should most welcome a searching revelation of the errors embedded in their doctrine. Only to separate error from truth in philosophy what we need is not less of rigid and subtle logical analysis, but more. To make such an analysis of the fundamental notions of a theory of knowledge or a metaphysic is, no doubt, a harder and a more arid task than to dispose of the whole subject by a few uncriticised "postulates of the will". But it has the advantage that when once duly executed it is final, whereas, after the desired postulates of the will have been made, there must still remain an uneasy doubt whether they were postulated because they are necessitated or merely because they are what we should like to think. Many of the conclusions at which Mr. Sturt arrives are such as I, for instance, should be unfeignedly glad to think justified, but my wishes in the matter cannot, and, I still hold, ought not to prevent the obstinate recurrence of the question, whether any adequate reason has been given, after all, for believing in them. Hence while I find *Idola Theatri* everywhere an interesting book, I have to own that I cannot profess to find it at all convincing as a contribution to a constructive philosophical theory.

A. E. Taylor.

Concepts of Philosophy. By ALEXANDER THOMAS ORMOND, McCosh Professor of Philosophy in Princeton University. New York: The Macmillan Company, 1906. Pp. 720. 17s. net.

THIS is an attempt to construct an idealistic system of the univers It attracts admiration for its comprehensiveness, its clearness, and for many incidental merits, but judged as a coherent system there is much to criticise.

The author begins (p. 12) by a demonstration of the reality of consciousness. If anything is real, consciousness must be real, for what is real is "real only to consciousness". This next stage is, "if consciousness be real, then it is the great reality, and will supply the criteria of all reality". Asking what consciousness is, we are told that "from its very form as effort or agency it will be primarily volitional" (p. 13). And since this volition is selective, we may call it "purposive," and regard metaphysics as essentially teleological (p. 16).

On this demonstration the whole system appears to rest, since the author relies continually, in the course of his further arguments, on the result thus reached, that reality must be looked at teleologically, if it is to be looked at truly. It seems to be an inadequate foundation for such a superstructure. Undoubtedly, it is only through consciousness that *I know* anything else to be real, and I may possibly prove that my consciousness must be real by arguing that, whether I pronounce anything else to be real or unreal, my pronouncement implies a real act of consciousness. But to argue that because, if a table were real, I could only know it *through* consciousness, it follows that a table is only real *for* consciousness, is surely fallacious. It may be possible to prove that tables have no independent reality, but it will not be done so easily as this.

Thus, while Prof. Ormond may be justified in asserting that consciousness is real, he has not proved that "it is the great reality and will supply the criteria of all other reality". Neither would it follow from the fact (if it were a fact) that all consciousness is effort, that its aspect of effort is the most important thing about it, or that it is primarily volitional.

After the Introduction, the book is divided into three parts, one of Analysis, one of Synthesis, and one of Deductions. The first begins with a discussion of Consciousness as Knower, in which knowledge is divided into three branches—mathematical, physical and metaphysical, with the fundamental concepts of number, cause, and teleology, respectively. "Metaphysics," we are told (p. 38), "rationalises the world by presuming the uniformity and stability of the purposive agency of the world." If metaphysics is to be at liberty to "presume" trifles of this description, its work will turn out much lighter than most metaphysicians of the past have supposed.

The second chapter works out in greater detail the nature of the three branches of knowledge. The third chapter is entitled Methods in Philosophy and is almost entirely occupied with a discussion of Kant. In chapter iv.—The World of Existence—we have the distinction between objects and ejects. "This ink-bottle, for example, is object so far as it manifests itself to my perceptions. As object it is a manifested group of qualities. But the ink-bottle is also an eject. It is a persistent being which is not perception" (p. 101). The name eject seems rather inappropriate to designate the existence-for-self of any being, since it conveys a strong implication that it refers to something manufactured by the mind. Prof. Ormond obviously does not hold this, for on page 118 he speaks of "the great eject which we call God or the Absolute," and he holds God to exist for himself. Our conception of God, since it is necessarily partly anthropomorphic, might be called an eject, but to call God himself an eject seems—for a Theist—a misleading use of language.

The last chapter of the first part deals with Primary Certitudes. Among other matters, Prof. Ormond discusses the value of "belief-judgments". The highest type of these is the judgment that something must be real because it is "so related to a scheme of rational good that its non-existence would destroy the rationality of the system" (p. 133). He decides for the validity of real judgments, partly on the ground that "metaphysics is teleological". But teleology and effort towards the good are not necessarily connected. All that the author has proved, even on his own showing, is that the universe must be looked at by the aid of the idea of intelligent effort. Now the activity of Nero, or of Milton's Satan, or of the God of certain past theologies were cases of intelligent effort. But a universe ruled by such beings would be one in which, the better a thing was, the less likely would its existence be.

The word rational is rather dangerously ambiguous. Its primary and most usual meaning refers to truth only. And thus when it is said that the non-existence of anything would destroy the rationality of a system, it seems as if its non-existence had been refuted by an ordinary *reductio ad absurdum*. But Prof. Ormond uses rational as a value-term. "Of course," he says (p. 135), "the best is the most rational." Now, if rational is used in this sense, the fact that the non-existence of anything would destroy the rationality of a system is not the slightest ground for rejecting its non-existence, unless you have previously connected the two meanings by proving that what is evil is either self-contradictory, or contradictory to admitted facts. This Hegel, for example, tried to do. But without this—and it has no place in Prof. Ormond's work—to argue from one use of rational to the other is as unjustifiable as an argument from the lawn in a garden to the lawn of a bishop's sleeves. The mistake may not, psychologically and etymologically, be as gratuitous, but logically it is quite as fallacious.

The second part is again subdivided, the first division being entitled "From Physics to Sociality". Here, after an introductory chapter, the author deals with Physical Activities and then with Organic Activities. The latter chapter contains a more detailed discussion of Evolution than is perhaps appropriate in a work on philosophy. On page 176 there is an important passage: "We cannot be satisfied to rest in a theory of the world that excludes intelligence and finality from its heart". The proof of this apparently is that, unless intelligence is supreme, the ultimate explanation of things would be "mere accident or blind fate". But, after all, all explanation must be based on something which is not explained. If we take the explanation which ultimately satisfies Prof. Ormond—that of Theism—the existence of God is a fact which we should only be able to recognise. We could not say how or why he existed, but only that he did exist. God's existence is not due to intelligence, for it is due to nothing, and if the theories of Pantheism or Materialism are to be condemned as referring things ultimately to accident or blind fate, I do not see how Theism can be said to be in a better position. There are various grounds on which Theism might be defended as a better explanation of the universe than Pantheism or Materialism, but it no more avoids an inexplicable ultimate than any other theory.

Conscious Activity and The Mental and Physical are the subjects of the next two chapters. In each chapter the question turns up of the real nature of objects which are *primâ facie* material. The conclusion is that their true nature is probably spiritual. The discussion is able and interesting, and it is a painful shock to come across a passage like this: "Why should there be anything deeper than phenomena, or more profound than the parallelism of the two orders? Simply because consciousness in its organ of reason will not have it so. A world which ended here would be a scandal to reason" (p. 255). Here again we are left in complete darkness as to whether Prof. Ormond means that he would disapprove of such a world, or that he would commit a logical error if he believed in it. The former is interesting, but inconclusive. The latter would be better if it were not put in a form which suggests that a contradiction becomes impossible only when it is perceived to be a contradiction.

The rest of this subdivision consists of three chapters on Society, which are more psychological and sociological in their interest than philosophical. It is to be noted, however, that the author regards human society as merely a means. "The social organism is not an end in itself. It is, in the last analysis, a function of individuals in social interaction and it exists as a means for the development of the individual's life" (p. 327).

At the end of the discussion of Society comes a transition to Theism. "The social consciousness supplies no principles of final unification. The social world as a whole is thus left to accident

and blind fate, *unless we rise to a final synthesis in which the world-movements as a whole are conceived as organised and guided under an all-comprehending thought and purpose.* . . . The final metaphysical implication of sociology seems to point to an eternal consciousness in which the world-movements as a whole are conceived and purposively directed to a unitary end" (p. 332). And again, "an all-comprehending purpose is a form of agency which can be exercised only by consciousness that is able to relate itself in like manner to every part of the real, and, therefore, to *reality as a whole.* Some eternal consciousness that shall be the adequate bearer of an all-comprehending purpose, seems, therefore, to be the last postulate of metaphysics" (p. 335).

The argument does not seem to take account of the possibility that the ultimate synthesis might be the system formed by the connexion of the finite selves—not, of course, their connexion in present society, but their ultimate and eternal connexion. Such a system would, I suppose, be condemned by Prof. Ormond as a mere brute fact, but it does not appear very evident why it is to be condemned on this ground any more than the equally ultimate fact that there is a God, and that he has this particular purpose.

It might be said that the previous conclusion that the universe is to be looked on teleologically requires that it shall be conceived as the result of the purpose of a conscious being. But here there seems a dilemma. Either it is sufficient to conceive the *activities* of the universe to be produced teleologically. This would be the same if the whole of reality was a system of selves, since the activities of selves can be regarded teleologically. Or it is essential to explain the existence of the *substances* in the universe as the results of purpose. Then Prof. Ormond's theory must itself be condemned, since it does not regard the most important substance of all—namely God—as the result of any purpose. For God is not a result at all.

We now pass to the second subdivision of Synthesis, entitled From Sociality to Religion. The first chapter deals with Ethical Activities, in which we may note that the author regards the concept of "*ought, obligation,* or *duty*" as more central than the concepts of right and good (p. 341). In the next chapter the discussion of Freedom seems to fail in clearly distinguishing between Materialism and Determinism. Supposing that our determining causes were all spiritual and all teleological, we might be as inevitably determined as on the most Materialist theory. Such determination need not be either self-determination or determination to the good. If those theologians had been right who held that God had, for his own glory, predestined certain men to damnation, the cause of their damnation would have been spiritual and teleological.

After a short chapter on Emotion and Rationality Prof. Ormond passes to Religion. He considers that "the idea of religion could

not arise in the experience of one who had not in some way become conscious of relatedness to some mysterious being outside of himself that impressed him as being superhuman; that is, free from some of the ordinary limitations of humanity, but that, notwithstanding, was in many respects also like man himself—a being of his own order, yet in a sense superordinary. It is in this synthesis of the *ordinary* human and the *superordinary* that we seem to find the pith of the consciousness that may be called religious. Let us attempt to cancel either factor, and religion vanishes, leaving in its place either the purely social or a mere sense of mystery that does not know whether to be religious or not" (p. 416).

Chapter v. deals with the Origin and Development of Religion. The theory put forward by Prof. Ormond on this subject would have to be judged by empirical anthropology. It has no bearing on the author's general philosophical position.

Two chapters are then occupied by the discussion of the characteristics of various religions. The conclusions reached may be summed up generally in the propositions that religions are higher as they approach to Christianity. In particular, the author regards the ideas of God, mediation, sin, and salvation, as essential to a satisfactory religion.

The argument then proceeds to the consideration of The Individual and the Eternal. "We ask . . . are the divine purposes always victorious? and we answer in the affirmative, for we cannot conceive God as being defeated in his purpose" (p. 526). Is sin then (to say nothing of other forms of evil) no defeat of the divine purpose? The answer appears to be that sin will not win in the long run. "In the long run when ultimate results are counted" the wicked man "will find that the instruments which he used for evil have conserved the good end which he hates" (p. 529). It would seem from this that the temporary predominance of evil has nothing repugnant to God's nature in it. Prof. Ormond can scarcely mean this, but, if he does not, how can he deny that God's purposes are to some extent defeated?

The author goes on to accept personal immortality, resting his belief largely, though not exclusively, on an ethical argument suggested by Kant's treatment of the subject (p. 531). The second part closes with a chapter on Sin and Retribution, chiefly remarkable for the light-hearted way in which pain is pronounced not to be an evil. ("We may then exclude pain, as Nature's life-warden, from the category of evil," p. 537.) Of course pain often prevents greater evil—very frequently this greater evil is simply greater pain, but not always. And in this case it is better to have the pain than to have the consequences of its absence. But this gives no ground whatever for asserting that the pain in question is not evil although it may, the world being what it is, be the only alternative to a worse evil.

The third part begins with a chapter on Method. This is

followed by a discussion of Nature, in which the following may be moved: "the uniformity we predict in Nature is simply the congruity of its movements with the fundamental aims of living; it is, in short, a prediction that Nature in relation to the fundamental aims of life will be rational, orderly and good" (p. 589). Doubtless our life could not, under present conditions, exist for an hour if we had not the uniformity of Nature to guide our actions. But does the uniformity of Nature assure us that Nature will be in harmony with our fundamental aims? If all men were doomed to become increasingly miserable and wicked through endless time, how would that conflict with the uniformity of Nature?

Then follow chapters on the Idea of God, the Nature of Man, Freedom and Destiny and Man's Environment. In these, however, the author confines himself to working out the fundamental ideas which he conceives himself to have already established, and space does not admit of tracing his deductions in detail. The book ends with a discussion of the Will to Believe which Prof. Ormond is not prepared to accept as fully as the Pragmatists, while he does not altogether reject it.

There is very much that is interesting in *Concepts of Philosophy*, but I doubt if it leaves Idealism any stronger than it found it.

J. Ellis McTaggart.

Über die Stellung der Gegenstandstheorie im System der Wissenschaften. Von A. Meinong. Leipzig: Voigtländer, 1907. Pp. viii, 159.

This book is a defence of Meinong's views against various critics, and a further explanation of the new science which he calls "Gegenstandstheorie". The necessity and importance of this science are vindicated, and reasons are given for not identifying it with logic or theory of knowledge or any other science which has hitherto received a name. The style is remarkably clear, and the polemical arguments appear to the present reviewer to be generally cogent, except (needless to add) when they are directed against himself.

After a brief introduction, Meinong proceeds to consider what he calls "homeless objects," by which he means the non-existent objects of presentations which do or may exist. Such are, for example, colours: these are not mental, for they are quite distinct from presentations of colours, and they are not physical, for they do not exist in the material world. (This might be questioned; but as Meinong has argued the question elsewhere, he is content to assume the result of his previous discussion.) Thus although presentations of colours exist, colours themselves do not exist. Yet there are many true propositions about colours, *e.g.* that black differs from white. To what science are such propositions to be

assigned? Not to any of the sciences which deal essentially with what exists, but to a science which deals with objects as such, *i.e.*, to *Gegenstandstheorie.*

The knowledge which composes this science is *a priori*, *i.e.* independent of experience in the narrow sense. Meinong explains that he does not require the *constituents* of a proposition to be known independently of experience; thus "black differs from white" is for him *a priori*, in spite of the fact that black and white are given in experience. By *experience* he means apparently perception. Knowledge as to what exists always depends upon perception; but the knowledge which constitutes *Gegenstandstheorie* is independent of existence (*daseinsfrei*), and therefore independent of experience, *i.e. a priori.*

The question of the exact division of propositions into such as depend upon perception and such as do not appears to me to involve certain difficulties which Meinong (I think) overlooks, and which make them not identifiable with such as are existential.[1] For example, he considers the proposition "Ghosts do not exist" as existential; whatever affirms an existence or a non-existence, he says, is existential. Now it is plain that the knowledge derived immediately from perception is always affirmative, and that, therefore, any negative proposition can at most be *inferred* from propositions derived from perception, and that the implicational proposition by means of which the inference is made cannot be wholly derived from perception, but must either be or depend upon an *a priori* implicational proposition. Let us take an instance, say "Jones is not in this room". I do not perceive this; I merely perceive what *is* in this room; but I assume the proposition, "If Jones were in this room, I should perceive him". It would be difficult to disentangle the *a priori* element in this hypothetical, but it is plain that there *is* an *a priori* element, and that it is concerned with existence. It will be a proposition asserting that, under certain conditions, if a thing exists, it is perceived. Without some such premiss, no perceptions can warrant negative conclusions. I think, therefore, that the proper distinction between the empirical and the *a priori* does not lie in the presence or absence of the assertion of existence, but in the presence or absence of a particular subject[2] given in perception. This, however, requires modification for the case of general propositions arrived at by induction, such as the one instanced by Meinong, namely "ghosts do not exist". This proposition is of course empirical, and is derived by induction from the absence of ghosts on the occasions when they might reasonably be expected. But like all propositions obtained by induction, it is not certain,

[1] Some difference is admitted by Meinong (*e.g.*, p. 35), but of a different kind from that with which I am concerned.

[2] *I.e.*, a subject actually perceived or defined by relation to what is or was actually perceived.

but only more or less probable. Thus we may say that propositions about existence which do not have a particular subject are either *a priori* or uncertain. To take a more important instance: "Every event has a cause" may, so far as its form shows, be either *a priori* and certain or empirical and only more or less probable. Thus it would seem that the form of a proposition alone does not decide as to whether it is empirical or *a priori*, provided we include propositions for which the evidence is inductive; while, if we exclude these as being not strictly *known* the empirical is whatever contains a constituent which is particular in the sense of being a *this*, while the *a priori* is what contains no such constituent.

A considerable amount of space is devoted to proving that geometry is *a priori* and independent of existence. Much of this discussion is excellent, particularly an utterly destructive criticism of Mach's "Gedankenexperiment". But unfortunately Meinong considers it necessary to his thesis to contend that the axiom of parallels is *a priori* certain. His argument on this subject rests, if I have not misunderstood him, on an elementary blunder, namely, on the supposition that in non-Euclidean spaces parallel lines intersect. He argues, quite rightly, that the intersection of parallels is impossible; but this is never denied. The question is whether, through a given point outside a given straight line, there is one parallel or two or none to the given straight line. He argues that it is not a mere tautology to say that parallel lines cannot meet; this seems to be because he thinks parallels can be defined as lines having the same direction. But "direction," as a more intimate acquaintance with geometry would have taught him, is a notion which is only applicable when the axiom of parallels holds; and with any admissible definition of parallels it *is* a mere tautology to say that they cannot meet.

That pure geometry is *a priori*, is a thesis with which I am wholly in agreement; but in pure geometry the axioms are not assumed to be *true*, but are merely hypotheses in hypotheticals. Whether the space of the actual world is Euclidean or non-Euclidean, is not a question for pure geometry, but is an empirical question concerning what actually exists. Meinong argues at some length against the view that the space of the actual world might differ from a Euclidean space to an extent which would be beneath the threshold of observation. His reason is simply that "parallel" and "mutually inclined" are *precise* conceptions, concerning which *a priori* judgments are possible (p. 86). But this ground has no bearing on the question whether parallels are possible in the real world. This latter question is obscured for Meinong by the argument that straight lines, in any case, do not really exist, and that therefore no question concerning them can be one concerning what actually exists. This assumes that there is no such thing as absolute space, and further, that the world is not a plenum. But

even with these two doubtful assumptions, it still remains possible to indicate respects in which what exists will differ according as actual space (however understood) is Euclidean or non-Euclidean, though the differences become more complicated than in the abstract geometrical statement.

There is an argument (p. 14 ff.) in defence of impossible objects such as the round square, against criticisms passed in a previous review in MIND.[1] As the subject is important, I shall briefly state Meinong's contentions and indicate why they seem to me inconclusive. Impossible objects, it is admitted, do not obey the law of contradiction; but why should they? For after all, this law has never been explicitly asserted except of the actual and the possible, and there is no reason for assuming that it holds also of the impossible. This reply seems to overlook the fact that it is of *propositions (i.e.* of "Objectives" in Meinong's terminology), not of subjects, that the law of contradiction is asserted. To suppose that two contradictory propositions can both be true seems equally inadmissible whatever their subjects may be. The next point urged by Meinong is that my objections apply equally to such objects as "the golden mountain," which are not impossible, but merely non-existent. This I, of course, admit; indeed the object I specially attempted to demolish was "the present King of France,"[2] who is on a level with "the golden mountain". Meinong's next argument is an answer to my contention that, on his principles, "the existent round square" exists. To this he replies that it is existent, but does not exist. I must confess that I see no difference between existing and being existent; and beyond this I have no more to say on this head. Lastly, he argues that, although I affirm that there are no such things as impossible objects, yet I am compelled to make propositions about them, and thus implicitly to admit them. To this I reply that I was careful to provide an interpretation of propositions in which such objects seem to occur[3] and that therefore Meinong's argument was answered by anticipation. I see, therefore, no reason to admit that there are impossible objects; and the reasons against them still seem to me overwhelming.

In what precedes, I have dwelt chiefly on points in which Meinong seems open to criticism. But such points are few and slight compared to the points in which his views seem to me true and important. Moreover his contentions are in all cases clear, and whether right or not, they imperatively demand consideration.

B. RUSSELL.

[1] Oct., 1905, p. 532 ff. [2] "On Denoting," MIND, Oct., 1905.
[3] *Loc. cit.*, p. 490.

VII.—NEW BOOKS.

The Syllogistic Philosophy, or Prolegomena to Science. By Francis Ellingwood Abbot, Ph.D. Boston: Little, Brown & Co., 1906. Vol. i., pp. xii, 317; vol. ii., pp. 376.

This is a posthumous work. The author revised the manuscript of the book before his death in October, 1903, and it was published under the editorship of his son three years later. From Dr. Abbot's Preface we learn that the composition of his book was spread over a space of ten years, but that the views here expressed are the fruit of a much longer period of reflexion. The work itself is an ambitious attempt to reconstruct philosophy: the writer hopes it may be found to have done for philosophy what Linnæus did for botany. As I find it quite impossible to take this favourable view of *The Syllogistic Philosophy*, it may be well to say at once that the book is the production of an earnest and independent thinker who had read widely in some departments of speculative thought, and who developed his conclusions with confidence and tenacity of purpose.

One or two general observations may be made at the outset. The work contains an excessive amount of repetition. Instead of filling two large volumes the author might quite well have said all he has to say in one. In a treatise largely devoted to questions of Metaphysics and Epistemology one would expect some reference to the important and closely related province of Psychology, but here Psychology is entirely ignored. Again, while Dr. Abbot quotes largely, both in the original and translation, from Aristotle, Kant, and Hegel, he shows no sign of having studied appreciatively the work on Logic done by Lotze and Sigwart in Germany, and by Mill, Bradley, and Bosanquet in this country. Had this been the case his theories could hardly have been so inadequate and onesided.

It is not necessary, nor is it desirable, to enter on a detailed examination of the book. The needs of the case will be met if I state the chief points of Dr. Abbot's system and indicate some obvious objections. The main intention of the writer is to bring about a harmony of science and philosophy,—and this on a realistic basis which is not open to the charge of 'subjectivism' which he levels against idealism. Speculative idealism is described as the 'fad' of a school, and the future, we are told, belongs to a scientific realism which is founded on "the necessary identity in difference of experience and reason". *The Syllogistic Philosophy* begins with an axiom which is said to be self-grounded and to form 'a presuppositionless starting-point'. *Cogito ergo sum* is dismissed as a purely individual affirmation, and for it is substituted the axiom "Human knowledge exists". This, it is argued, is a true unity of an empirical judgment as content and a rational ground: and the axiom implies that *my* knowledge and *our* knowledge exist. After a way of his own Dr. Abbot shows that his axiom cannot be doubted and so must be held to be rationally proved. In point of fact he assumes and does not demonstrate

the implication of the *I* and the *We*. "Human knowledge exists" can only mean that 'I know that human knowledge exists,' which is just 'I know that I know'; and a proposition like this is futile unless you can specify the 'what' of knowledge as well as the 'that'. The truth is that every philosophy must begin by making some presuppositions; the attempt to rationalise these could only succeed if it were possible to realise the ideal foreshadowed by Plato, and to work out a completed system which returned on the beginning and embraced it in the articulated whole. This implication of existence and knowledge, reason and experienced fact, in his so-called Axiom is typical of Dr. Abbot's general theory, which sets the existence of the known object over against the knowing process and then seeks to obviate a dualism by reiterating the phrase 'identity in difference'. Hence the view of truth, repeated in various parts of the book, is that of agreement between object and concept. Dr. Abbot does not regard the cases of the negative and relational judgments which claim truth and yet are not provided for under the formula of simple agreement. Nor does he ever consider the difficulty that the object of knowledge must be already within the sphere of knowledge and affected by it, and so cannot act as an independent norm to which the knowing process must conform in order to achieve truth. The point has been much discussed lately and need not be laboured further.

The author's theory will be clearer if we explain his view of the syllogistic process, as he conceives it to obtain in nature and in mind. To exist is to belong to a kind or class; experience is of single facts or units, whether facts of being or states of consciousness, while "reason is knowledge of their principles, their necessary relations, and universal kinds." In the sphere of being each unit is determined as one of a kind, as specimen of a species, and so is a unit-universal. "Units of existence are the objects of perception, while universals of existence are the objects of intellect," and "the difference of sense and intellect, or of experience and reason, as modes of knowledge, is in the last resort determined by a difference of nature in the objects known" (vol. i., p. 39). "All real knowledge exists as the percept-concept of some kind of thing" (107), and every judgment, it is said, is an implicit syllogism and of the subsumptive order. One can only suppose that Dr. Abbot was led to take up this position through his conviction that the thinking process must somehow copy the order of facts. Take the case of judgments which directly express conscious states, *e.g.*, "I am hungry" or "I want that," and any one must see that it is absurd to construe these as implicit syllogisms. Perception no doubt involves inference, but it is often sheer artificiality to torture perceptive judgments into syllogisms. The author illustrates his contention by the judgment, "That is an oak". No doubt this may be cast into an inference in the First Figure, but the actual process of thought is the recognition of an identity between certain perceived marks and those known to belong to the oak. In fact, as Dr. Abbot should have known, class predication is not the sole type, and inference only demands interconnexion of elements and an identity to mediate between them. We may add that he zealously strives to show that the syllogism is imbedded in nature as the law of genera and species, in knowledge as inference in the percept-concept form, and in ethics as the principle of obligation.

Much space is devoted to a discussion of the right relation of the universal to the individual, and the author deals at considerable length with the views of Aristotle, Kant, and Hegel. And he shows how the Aristotelian theory that the εἶδος, or conceptual form, is the essence or constitutive principle of the individual has powerfully influenced modern thought. Drawing on Zeller's criticism he brings out the difficulties of a

theory where the essence of the individual should be the common form, and yet the specific difference seems to be due to the ὕλη which in its ultimate nature is unknowable. As against this Dr. Abbot lays stress on the importance of the individual difference, and supports his argument by reference to Darwin's view of the value of 'the advantageous individual variation'. His own solution is simply to say, that the individual difference is essential to the whole individual, and the whole individual essential to the whole species; so the essence of the species will include everything that is included in the essence of all the specimens (pp. 174-175). On this theory the most trifling features of the individual belong to the essence and are involved in the essence of the species. As great weight is attached to the principle that everything that is *evolved* must be *involved*, apparently the tendency of the individual to reproduce the type and the tendency to diverge from it alike belong to the essence of the type! Dr. Abbot attempts the impossible when he strives to solve the problem of individuality from without instead of from within.

The counterpart of the involution of specimen and species in being is seen in the involution of the *I* and the *We* in knowledge. The subject is important, and Dr. Abbot makes some points in an extended criticism of Kant, Fichte, and Hegel in this connexion. But it is quite misleading to argue that the fault of the Kantian philosophy lies in making relations subjective. One could wish the author had told us what he exactly means by relations which are external to knowledge. In the same category must be put the repeated statement that Hegel entirely separated experience and thought. Dr. Abbot's theory may be given in his own words: "Race-consciousness is the I's knowledge of itself as a unit in its own universal, and self-consciousness is the I's knowledge of itself as a universal in all its own units; but neither race-consciousness nor self-consciousness is possible in any real I, except in one personal consciousness of the I in the We, as a universal unit in its own unitary universal" (118). The author thinks that self-consciousness does not arise from the opposition of the self to the not-self, but through the interaction with other selves. He regards the problem as one for Logic only and seeks no help from Psychology: had he done so he would not have been so confident that the contrast with the not-self plays no part in developing the knowledge of the self, nor would he have supposed that he had solved the problems of imitation and intersubjective intercourse by the terms 'race-consciousness' and 'generic unity of apperception'. Moreover we are not told how a synthetic and a generic unity of apperception can co-exist and co-operate in the one self-consciousness. I will only add that Dr. Abbot's final formula for the Syllogism of Knowledge is the *I* in the *We* in the Absolute *I*, which is the identity in difference of both. Finally, the worlds of Being and Knowledge, of Nature and Spirit, are differences which have their identity in God.

Throughout these volumes the phrase 'identity in difference' incessantly recurs, and plays the part of a good angel in healing all divisions. We hear of an identity in difference of experience and reason, of spontaneity and heredity, of mechanism and teleology in a way that reminds us of a trenchant saying of Prof. James's, 'Philosophy lives in words'. After all this one is bewildered to find, in a chapter on the Dialectic Method, Hegel attacked for denying the laws of Identity and Excluded Middle!

Dr. Abbot was evidently a sincere and self-reliant thinker, and one would have been glad had it been possible to write more favourably of his book. Yet if we judge the book on its merits, as the author would have us do, we can only say that it does not open out a new and fruitful line of advance in philosophy.

The Persistent Problems of Philosophy. An Introduction to Metaphysics through the Study of Modern Systems. By Mary Whiton Calkins, Professor of Philosophy and Psychology in Wellesley College. New York : The Macmillan Company, 1907. Pp. xxii, 575. Price 10s. 6d.

This book has many admirable points, but it is marred by certain defects which make it impossible to recommend it without reservation. This is the more to be regretted since the scope and manner of its treatment would fit it exceedingly well for a text-book. A book combining historical with systematic exposition in the way here attempted by Prof. Calkins would supply a much-felt want. But a text-book must be trustworthy throughout, and I, for one, should not send a beginner to Prof. Calkins's book, unless it be for certain selected chapters.

However, before offering some critical observations, there is the pleasanter task of pointing out its good features. The style, though dry and lacking in variety, is very clear and readable. There is an exceedingly useful appendix, containing biographical notices, a very full and serviceable bibliography both of Editions and of Commentaries, and certain critical discussions (mainly on Kant and Hegel) too technical for inclusion in the body of the book. The early chapters strike me as very good, more especially that on Berkeley, which contains a more detailed analysis of that philosopher's argument than is to be found in many a bigger work. Throughout the author supports her account by many references and quotations, which would make it easy to use her book as a critical commentary side by aide with the study of the original texts. The chapter on Hegel and a note in the appendix contain an original suggestion towards a reordering of the table of categories by substituting for the category of 'Becoming' that of 'Being Determinate,' and by omitting the categories of 'Quantity'. The final chapter deals with the most recent developments in philosophy—the various forms of Materialism (Hæckel, Mach, Ostwald), Pluralism, and Idealism (especially Royce). The criticisms throughout the book are made from the point of view of Absolute Idealism, which Prof. Calkins adopts in the form given to it by Hegel and Royce.

I must confess that I find the gap between Hegel and the most recent philosophers discussed in the last chapter somewhat hard to justify. Granted that 'with Hegel's system all logically possible ground-forms of metaphysical doctrine' are exhausted (p. 397), yet a chapter on Lotze, and also on Fechner, would have added to the value of the book. And would not the Materialism of Feuerbach, this 'Hegel turned upside down,' who regarded spirit paradoxically as the self-negation of material nature, have deserved an honourable mention ?

However, the most serious defect of the book is the treatment of Schopenhauer. We read : "Like Hegel, he conceives the ultimate reality as an absolute self — though he never uses, and even repudiates, this term. His great advance upon Fichte and Schelling consists in his implicit recognition of the personality of the absolute self. But . . . he inadequately conceives this personality, tending constantly indeed to identify it with impersonal force . . ." (p. 343). And again : "Schopenhauer admits the self-consciousness of the ultimate reality" (p. 360). Students of Schopenhauer will rub their eyes at this. What of the famous passage (§ 27 of "The World as Will and as Idea") in which it is said that consciousness and intelligence are a 'light which the will lights for itself' at a certain level of its objectivation, *viz.*, in those organic creatures that have a brain ? And in the very § 54 from which Prof. Calkins quotes the description of will as 'blind inexorable pressure,' Schopenhauer likens the world as idea, as object of consciousness, to a mere

'mirror' or 'shadow' of the will. From the interpretation of natural forces as forms of will (§ 22), it does not follow for Schopenhauer that the will as metaphysical principle must be conceived as conscious desire. That is merely another form of its objectivation—though the form which gives us a clue to the other forms.

Further, is there any authority for treating Schopenhauer's Pessimism as a mere 'corollary' (p. 352) and 'off-shoot' (p. 357) of his Metaphysics? Surely that inverts the real relation. Schopenhauer's Pessimism and Metaphysics are simply his temperament 'writ large'—a temperament characterised by the ceaseless conflict of a restless, impulsive will and an intellect seeking peace in philosophical and artistic contemplation.

Of course, no arguments will make Schopenhauer logical or consistent, but it seems a mistake to force on him an interpretation which runs counter to the whole quality of his thought.

Another thinker with whom Prof. Calkins is obviously out of sympathy is Kant. To say that "there is little which he taught that cannot be discovered better stated in the doctrines of predecessors or of successors" is an absurdly low estimate. And both the presentment and the criticism of Kant's doctrine are biased by the author's Hegelian point of view. However, in this Prof. Calkins is not the only offender. It may fairly be said that no Hegelian critic has ever done justice to Kant, because not one of them has ever tried to face the problem from Kant's point of view. Hence the Hegelian criticism of Kant becomes a wearisome catalogue of alleged errors and inconsistencies. All the distinctions essential to Kant are either ignored or denied. I have room only for one illustration. What is the point of reiterating that the 'thing-in-itself' is knowable (in the sense of not being out of relation to consciousness)? Did Kant ever deny that it could be *conceived* or *thought?* Kant never denied that, if we liked, we could apply all the categories to it. He only denies that this application gives us any knowledge, entitles us to any valid determinations of the thing-in-itself, for knowledge is found only in the application of the categories to the manifold of sense. In short, to criticise Kant by using the term knowledge in a different sense from his is hopelessly ineffective.

Perhaps Prof. Calkins will see her way to improving her account of both Kant and Schopenhauer in a second edition. No teacher can honestly recommend her book to a beginner as long as the treatment of Kant is so one-sided.

One last remark: Prof. Calkins makes a gallant attempt (pp. 451 f.), following Royce, to prove the compatibility of freedom of the will with Absolute Monism, but she succeeds only in producing the same shifty and disingenuous arguments which always result from an attempt to accept both sides of a contradiction as true. The only treatment of freedom open to Absolutists has been indicated once and for all by Spinoza. And no distinction of 'eternal' and 'momentary' self can really reconcile the assertions (1) that the human self is an expression of the will of the absolute self, (2) that the self *may or may not* conform to the absolute will. To say that "choice in opposition to the absolute will is, ultimately, a subordinated element in the absolute will," is to my mind meaningless. And to admit freedom from a 'partial, momentary point of view' whilst denying it from an 'ultimate' one, is valueless, because freedom claims essentially to be true from an ultimate point of view, or else to be denied outright.

R. F. A. H.

The Cause of a Voluntary Movement. By Robert Sessions Woodworth, Adjunct Professor of Psychology in Columbia University. Houghton, Mifflin & Co., 1906. Pp. 42. (Reprinted from *Studies in Philosophy and Psychology*, a commemorative volume dedicated to Prof. Charles E. Garman, of Amherst College.)

Step by step, the potency of the "image," which has for so long flickered pervasively over the psychologic page, is suffering loss. First there was the protest against the associationist percept—sensation plus images; then in Germany and America (the work in England was consistent, but is not yet published) it was shown that recognition and comparison are not aided by them, as had been supposed; and now their efficacy is being attacked in their usually admitted function as "cues" or "causes" of voluntary motion.

Prof. Woodworth groups psychological opinion on this matter into two divisions: one, which holds that the direct cause of the movement is always a kinæsthetic image; another, which holds that any image of the results to be gained by the movement may constitute its cue. With thirteen subjects, most of them practised in introspection under test conditions, working on the voluntary execution of familiar movements, he puts these positions to the proof. "Nearly one-half of the cases (128 in number) showed no imagery, the kinæsthetic image was observed in only one-fifth of the cases, and only half of these showed adequate images, *i.e.*, images which were fair representations of the actual sensations of the movement." On what is probably the more important case, the acquisition of new movements, he quotes Bain and his own experiment (*Le Mouvement*, p. 330) on the isolation of the extension and flexion of the great toe. Coupled with these are some observations of Kirkpatrick and Trettien on the process of children learning to walk. It seems to me that there may be some relevant differences between the re-cultivation of movements which have normally passed out of voluntary control, and those which are, so to speak, in the direct track of normal evolutionary progress; the question is, perhaps, worth further attention.

An interesting paragraph summarises anatomical and physiological evidence to show that the kinæsthetic area is not involved in many movements, such as the turning of the eyes for direct vision, where we might reasonably have supposed a kinæsthetic intermediary. "Having thus attempted to show that in special cases the voluntary control over bodily movements is not acquired by means of kinæsthetic imagery," Prof. Woodworth brings forward two general considerations. The first emphasises the extreme importance of the kinæsthetic sensations as shown by the well-known effects of their loss. They are usually reflex indeed, but may become the object of attention in deliberately preparing for a movement. But this seems to provide a place for the corresponding images to function in. No, argues the author, a sensation of flexion is followed by, or is the cause of, a movement of extension, whereas it is argued that an image of flexion produces flexion. Opponents would doubtless assert that the images they regard as operative in directing new movements are not merely reproductions of the residua of past sensations, but are compounded into new and hitherto unexperienced wholes, and are never mistaken for sensory contents. The second general consideration results from the fact that voluntary *bodily* movement is rare. We *will* and *intend* changes in objects, not in our own bodies. Doubtless we do, but does an image intervene of the position our body must take up to make the required changes? For myself, in

watching children acquire new movements at games, I have concluded that, if imagery of any sort does intervene between what is willed and the movement executed, then such imagery has a rapidity and definiteness which, I believe, even its staunchest advocates have not claimed for it.

A further working over of the experimental results leads Prof. Woodworth to conclude that imagery other than kinæsthetic may be equally inoperative in the production of movement. The illustrations are good, and the argument cogent; the essence of the conclusion is expressed in these words: "The intention to do a particular act may be clearly attended to without any image lying in the field of attention: the image cannot, therefore, be the identifying mark of the act towards which attention is directed".

A third section introduces us to a third negation based on the introspective evidence. Not only must we reject the kinæsthetic image as adequate, other images must go too, and "the very thought, the field of attention just prior to the movement is often inadequate as a distinguishing mark of the movement". The movement depends upon the whole "set of the nervous system at the moment". But as the author admits that "the intention to act" (to make some change in the situation) "adds a new partial adjustment to the existing sum of adjustments," he probably allows as much place for thought determination as would generally be claimed.

I am, perhaps, too much in sympathy with the author's point of view, competently to criticise his work. But to me, at least, this pamphlet seems of the highest importance. The question of voluntary motion, the method by which the new is imposed upon and finally supersedes the old, is not only of extreme importance in evolutionary theory, both biological and psychological, but in the practical realm of education a knowledge of the process by which this is effected is of the highest moment. Prof. Woodworth has made a valuable, earnest and generally cautious contribution to the subject.

The lack of division into chapters or sections has made misrepresentation by the reviewer more probable.

W. H. Winch.

Sex and Character. By Otto Weininger. London: Heinemann, 1906. Pp. 356. Price 17s.

This is a translation of a book, first published in 1901, which in Germany has attracted considerable attention and in some quarters great enthusiasm. According to the alluring advertisement which is prefixed to this translation under the title of "Publisher's Note"—a scarcely commendable innovation—many readers will close the volume "with almost religious reverence".

The problem which the book undertakes to solve is "the woman question," understood in a very large sense as the chief problem now before humanity, and thus comprehending a great many other large questions such as the nature of genius, personal immortality and even Anti-Semitism. The author disdains everything of the nature of empiricism (and the production of "the soulless psychology" is, he states, to the everlasting disgrace of England), finding the solution of the problem before him in simple abstract principles. His chief predecessors, he considers, have been Plato, Kant and Christianity, but it has been reserved for himself to settle this problem of woman with all that that solution involves. He starts with a certain conception of bisexuality, of

maleness and femaleness, as coexisting in all persons whatever their apparent sex may be. "Man" and "woman" correspond to nothing concrete; they are types; every person is really made up of a certain amount of maleness and femaleness in combination, one of the corollaries of this doctrine necessarily being that hermaphroditic transitions are normal, not pathological. In this combination it is, however, Man that is the real, vital, moral element; Woman is mindless and non-moral, a pure manifestation of sexuality. "Man is form, woman is matter," Weininger declares in the Platonic spirit. In other words, woman is "nothing". In the end, he admits that, though with difficulty, it is possible to see in what direction woman could attain her emancipation. It can only come from man, but from man grown pure, and so able to help her to overcome her own overmastering and even unconscious sexuality. Procreation must cease. Nothing of value will thereby be lost; we shall still be in possession of our immortal souls. Wagner, "the greatest man since Christ's time," has in *Parsifal* produced "the greatest work in the world's literature," and Kundry is the supreme artistic embodiment of woman. There is no salvation for Kundry unless her Parsifal arrives.

The book is throughout clearly, vigorously and boldly written. Its aggressive statements are set down, for the most part, without heat but with supreme self-confidence, and without qualification or condition. The book is full of ideas, and contains many admirably written passages, too often spoilt by absoluteness of statement or perversity of interpretation.

It is a book that really belongs to the region of personal psychology, and here its interest lies. It was written by a youth who was only twenty-one when it was published and who shot himself two years later. These facts, and much in the book itself, have suggested to some that the author was insane. According to Probst, in his psychiatric study, *Der Fall Otto Weininger*, his childhood and early youth were not marked by anything specially abnormal; it was not, indeed, until after the publication of this work that his personality underwent a change; he became a thorough-going mystic, looked upon Nature as a symbol, became ascetic in his habits, suffered much from depression, went for frequent long tours, imagined that he was a great musician, and finally committed suicide in the house at Vienna in which Beethoven died. Probst has to rely largely on the book for his diagnosis which he formulates as "hysteria of maniacal-depressive character in a so-called 'dégénéré supérieur'". It is clear that Weininger was by no means insane in any technical and certifiable sense, but it is equally clear that he was a radically morbid person. A perfectly sane youth would have refrained from proclaiming to the world that, once and for all, he had "passed judgment on woman". Youth, certainly, is the time for ideas, but a youth who really had in him the mental force and calibre to grapple with a great problem would, like Darwin, have kept the secret to himself for thirty years of quiet investigation. But this neurotic young doctor of philosophy lived in an intellectual hot-house; he had soaked himself in all the ideas of his time, until in his arrogant egoism he was often no longer able to recognise their sources, for he constantly puts forth the ideas of others as his own, the originality mainly lying in the extravagance of the presentation. It thus came about that a highly gifted youth expended himself at the threshold of life in a pyrotechnical display which, however brilliant it may seem, can scarcely throw any illumination on the problems of the real world.

HAVELOCK ELLIS.

The Unity of Will: Studies of an Irrationalist. By G. Ainslie Hight. London: Chapman & Hall, 1906. Pp. 244.

This book is not without a certain suggestiveness, but is lacking in adequacy and coherence of treatment. Marked by some depth of insight, it contains no thorough discussion or clear exposition of the matters dealt with. It is a book that must be looked on as a symptom, or as expressing an attitude, rather than as a careful treatise on its subject. The point of view is perhaps sufficiently indicated in the subtitle. Avowedly based on Schopenhauer's chapter on the 'Primacy of the Will,' these *Studies* add yet another item to the growing literature on the supremacy of 'will' over 'intellect'; and they seek to point out certain changes in various portions of philosophic method and theory which are held to ensue from this mode of conceiving the relation between these diverse aspects of consciousness, and the errors which result from neglect of it. But they contain nothing that is sufficiently worked out to call for specific criticism.

The opening chapter, dealing with the relation of philosophy to life, gives the keynote to the volume. It contains some excellent remarks on the true function of philosophy, commingled with turbid and violent criticism of what the author regards as 'the current views'. No doubt philosophy is, as he says, too much divorced from common life; but this can be remedied only by a gradual adjustment of these to each other, and is not mended by wholesale attacks on the 'philosophical specialist'. The central chapter, which gives its title to the whole, is intended to convey the doctrine that the 'metaphysical world,' containing and surrounding the physical, is directly apprehended in self-consciousness as being of the nature of Will, and that in exalted and poetic moments this is felt to be One. But the treatment is too meagre and disjointed to have much, if any, value. The two chapters on 'Inspiration' and 'Routine and Genius' contain the rudiments of a corresponding theory of knowledge. For the rest, though there is nothing exactly new in the book, and certainly nothing thorough, it touches on some truths that are not sufficiently recognised. The author summarises his views at the end of the volume in a series of 'first principles'; but these, like the book itself, lack sequence and sense of proportion.

Why, one may ask by way of general comment on the book and its subject, do writers on the primacy of 'will' not try to bridge the chasm (largely of their own creation) between it and 'intellect' by simply insisting on the essentially tentative and progressive nature of thought? If consciousness (which is always consciousness *of* something) is the essential character of thought, and also pertains to will, how can the latter be distinguished as more ultimate than the former? Unless will, as such, is not conscious, it signifies only that consciousness, as such, is progressive or 'conative'. Rationalism (the principle that thought and being are fundamentally one) is thereby modified certainly, but not therefore refuted.

T. M. Forsyth.

The New Mysticism: Six Lectures given in Kensington, and at Cobham, Surrey, November, 1906. By Adela Curtis. London: Curtis & Davidson, 1906. Pp. 196.

It would be easy to make fun of a 'Science of Silence' in which "words as we know them are of little use," yet in which words divested of their usual associations to take on some vague Absolute significance are, when

'meditated' upon to the accompaniment of deep breathings, the cause of spiritual regeneration, and, as a necessary consequence, of physical health; to smile at the direction "to picture the breath as circulating endlessly in an ellipse about the spinal cord, carrying the word with it down the front of the vertebral column, up the back, over the brain and face, and down and round again" (p. 162); or to laugh heartily over the advice, seriously given, to get to an 'elemental experience' by the aid of a barrel-organ; but in spite of the odd mixture of highly dubitable philosophy, religion and science, seasoned with occasional nonsense, one is not altogether out of sympathy with this effort to formulate a strange and significant set of experiences which has arrested the attention of so eminent a psychologist as Prof. James. The intention of the 'New Mystic' is evidently to withdraw into the actual experience of a sort of Bradleian Feeling-Absolute, whence he returns invigorated, refreshed, 'illumined,' and, somehow or other, enabled to remould the world to his heart's desire. He effects this by deep meditations on words of infinite significance, such as Spirit, Life, Holiness, Health, Love, "connecting these by deep breathings with his body" which the 'New Mystic' does not regard as a hindrance to perfection, but as an indispensable means to Illumination. Just as he does not wish to withdraw permanently from the world, but "to make it the full reflexion of the Truth within him, until he has realised that God, the Soul and the World are one". We are assured that a "wholly new order of consciousness is being evolved," the 'appearances' of sin and pain and error are being banished from the world: "No suggestion of evil can affect the soul when she is subconsciously controlled by the Spirit of Infinite Goodness which is her true, perfect and eternal Self". These are highly desirable results and one wishes it were lawful to initiates, 'masters of silence,' to speak more intelligibly regarding the causes by which they are produced. There seems something sound in the insistence upon our power and our obligation to exercise our will on the course of our thoughts; and there is much force in the statement that "the world will never be perfect to man until he wakes up to the Truth that he is the maker of it" and ought to mould it according to the pattern of Perfection within his own mind, using for that purpose the 'Power' which is God working in us (pp. 175-176). This is all very well, but the poor philosopher whose business it is to understand things would like a somewhat clearer systematic doctrine, and could, for the sake of that, put up with less edification. In the meantime we trust that whatever grains of truth for practice are contained in such teaching may not be lost sight of under the heaps of big talk and bigger nonsense with which they are so often associated.

D. M.

Dialogues Concerning Natural Religion. By David Hume. Reprinted with an introduction by Bruce McEwen, D.Phil. Edinburgh and London: William Blackwood & Sons, 1907. Pp. cviii, 191.

This is by no means the least important or interesting of Hume's works, and it is one which no student of the Philosophy of Religion ought to neglect even at the present day. The present edition is convenient and attractive in form, and it contains an excellent introduction by Dr. McEwen. Dr. McEwen argues convincingly that Hume's own views ought to be identified rather with those of Cleanthes than of Philo. It is an unfounded prejudice to assume that Hume accepts, or that he is logically bound to accept, the consequences of his own sceptical philosophy in dealing with religion. He always recognised that his scepticism could

not be followed out in the practical concerns of daily life. And this is a point emphasised in the dialogues. He seems to have accepted the teleological argument as affording an adequate practical ground for believing in an intelligent principle in the universe. His chief difficulty was connected with the problem of Evil. He could not find any sufficient reason for inferring that the intelligent principle was just or good in any ordinary sense attached to these terms by human beings. Even here, however, his personal faith was probably not limited by his power of justifying it on logical arguments.

G. F. S.

An Outline of the Idealistic Construction of Experience. By J. B. Baillie. London: Macmillan, 1906. Pp. xx, 344.

A review of the above work in the form of an article by Mr. R. F. A. Hoernlé, which has been postponed owing to considerations of space, will appear in the next number of Mind.

Französische Skeptiker: Voltaire, Mérimée, Renan. Pp. vi, 304. *Deutsche Skeptiker: Lichtenberg, Nietzsche.* Pp. vi, 239. Von Robert Saitschick. Berlin: Hofman & Co., 1906.

As literary studies these two volumes have much merit. The style is crisp, clear and concise; the narrative what the French call fed with facts, well supported by references, and so arranged under general headings and detailed in such lucid order as to put the least possible strain on the reader's attention. But the author aspires to be something more than a literary critic, offering himself to us as a philosopher. His two volumes are described in their second title as contributions to the psychology of modern individualism. An English essayist might call them studies in temperament. And they are meant to impart knowledge of practical value. "The most effective knowledge," says the author in the preface to his "French Sceptics," "is the knowledge of men, and the more concrete our apprehension the more effective it becomes". Now this is perfectly true of such knowledge in its application; our knowledge of those with whom we have to deal, to be of any use, must be minutely particularised. But it does not follow that a minute acquaintance with the psychology of historical characters is of any practical value whatever. If we had any prospect of ever meeting and entering into friendly relations with Voltaire and the rest of them these two volumes would be most useful as guide-books. But that, as the six Scotchmen told Lamb about Burns, 'is impossible'. The question is whether if we met a living sceptic we could understand him any better for having made a careful study of Herr Saitschick's prepared specimens. I do not think that we could. To give us that power some sort of abstraction would be necessary. The general type of a sceptic should be constituted; and here there is not even the attempt to construct such a type. Nor can we construct it for ourselves. The five specimens seem to have nothing in common except that they are all good writers—an accomplishment shared by them with some dogmatists, notably with the cocksure Macaulay. And, talking of cocksureness, it seems rather odd to find so very dogmatic a thinker as Nietzsche enrolled among the doubters—so far as I can make out, on the strength of a single casual utterance. Indeed there seems no better reason for his inclusion than the necessity apparently felt by every new German writer of giving his opinion about Zarathustra. In this instance so much weight is thrown on the personal

factor that the philosophy of the Superman comes off with but scanty notice. Here and elsewhere that same personal factor counts for much more than it is worth, while the historical antecedents and the literary environment are proportionately neglected. Nietzsche really owed much more to Darwin and Spencer than to Schopenhauer, and, generally speaking, more to English than to German writers. Being however afflicted with a vanity which at length developed into insanity he studiously concealed the extent of his obligations by a systematic and brutal depreciation of Englishmen.

Lichtenberg, who was a real sceptic, offers a marked contrast to the hermit of Sils Maria. This writer, too little known among us (you can get him cheap in the Reclam) was an enthusiastic admirer of England where he spent some time in the early years of George III. The practical common sense of our people seems to have impressed him favourably by contrast with the pedantry of German University circles. The sketch of his life and opinions is the pleasantest of the five essays that make up Herr Saitschick's two volumes. Lichtenberg was a Professor at Göttingen, not apparently a very strait-laced place in those times, for his home was shared by two adored companions in succession, of whom the first died before he could make up his mind to marry her, and the second only became his wife after she had borne him more than one child. The impression conveyed is that of a Faust who has made Gretchen an honest woman and returned in a slightly ironical spirit to the discharge of his academic duties.

Of the French sceptics—Voltaire, Mérimée and Renan—the first is the most satisfactorily handled. The treatment of Renan is prejudiced and incomplete.

A. W. Benn.

Das Pferd des Herrn von Osten (Der Kluge Hans); Ein Beitrag zur experimentellen Tier- und Menschen-Psychologie. Von Oskar Pfungst. Mit einer Einleitung von Prof. Dr. Stumpf, so wie einer Abbildung und Fünfzehn Figuren. Leipzig: J. A. Barth, 1907. Pp. 193.

"A horse which answers correctly problems in multiplication and division by stamping. Persons of unquestionable good faith who receive answers to such problems in the absence of the horse's teacher and are sure that they have not given the slightest indications. Thousands of spectators during many months, connoisseurs in horses and in tricks, of whom none detected any regular signs. This was the problem. And the solution—very small unintentional movements" (Prof. Stumpf's *Einleitung*). In general, the mode in which this wonderful animal performed its calculations and other feats was after this fashion. The questioner, standing by the horse's side, inquired either aloud or mentally: What is 13×4? He then looked towards the horse expectantly, and in so doing slightly bent his head. The slight bend of the head was the signal for the horse to begin stamping, and he went on stamping so long as the head continued bent. But when the horse had stamped fifty-two times, the mental tension of the questioner was relaxed and he again raised his head. This was the signal for the horse to cease stamping. He had solved the problem. The slight motions of the head were made quite unknowingly until their efficacy was suspected, and then the same results were produced by making them intentionally.

No reader of Dr. Pfungst's pamphlet can entertain a shadow of a doubt that the horse's behaviour is accounted for in its minutest details by such minimal movements, and that it can be accounted for in no other way. It

should be said that the horse's trainer was himself entirely misled and is to be completely acquitted of wilful deception.

G. F. S.

Das Weltproblem vom positivistischen Standpunkte aus. Von I. Petzoldt. Leipzig-Berlin: B. G. Teubner, 1906. Pp. x, 152.

This little book is published in a series entitled "Aus Natur und Geisteswelt. Sammlung wissenschaftlich-gemein verständlicher Darstellungen". The author occupies his whole space in negative criticism of the concept of substance as something absolutely fixed and immutable throughout all change. He follows this concept through the whole history of Philosophy, reaching the conclusion that all philosophical work from Thales to the present day only serves to show how baseless and misleading the search for an absolutely immutable principle is. Dr. Petzoldt's own view is that there is no such absolute being, but only thorough-going relativity. He himself identifies his doctrine with that of Protagoras. The book is interesting, though on the historical side it is far from accurate, and though the author's formulation of the world-problem and attempted solution will appear very unsatisfactory, except to 'positivists' of a certain type.

G. F. S.

Immanuel Kant. Darstellung und Würdigung. Von O. Külpe. Druck und Verlag von B. G. Teubner, Leipzig, 1906. Pp. vi, 152.

This is published in the same series as Dr. Petzoldt's work, noticed above. It contains a very lucid account of Kant's Philosophy and much acute and suggestive criticism. The exposition is evidently founded on careful and conscientious study, unbiased by prejudice in favour of a special interpretation. The main points selected for criticism are Kant's identification of the *a priori* with the subjective and his view that constructive Metaphysics must be based on analysis of pure concepts instead of a critical examination of experience with all its concrete content. Perhaps Dr. Külpe does not sufficiently recognise the degree in which it is possible to disentangle the conception of the *a priori* from that of Subjective Forms within Kant's own work. But as a matter of historical accuracy, this is better than committing the fault of many writers who wrongly regard the subjectivity of the *a priori* forms as being no essential part of Kant's doctrine as he himself conceived it.

G. F. S.

Der Begriff der Urteilskraft bei Kant. By Dr. Walter Frost. Halle: Verlag von Max Niemeyer, 1906. Pp. 136.

This volume states and discusses the various meanings ascribed by Kant not only to *Urteilskraft* but to the connected conceptions of Verstand and Vernunft, and to the various special forms, common and transcendental, in which these appear throughout Kant's writings. Dr. Frost's criticisms are chiefly directed against Kant's hard and fast lines of distinction; and he himself seeks to develop what he describes as being the 'biological' point of view. This very painstaking and detailed analysis may prove useful to those who desire a statement of Kant's conflicting definitions of these fundamental conceptions. The concluding chapter deals with Kant's employment of the Urteilskraft in the regions of æsthetics and teleology.

N. S.

I Presupposti Filosofici della Nozione del Diritto. Da GIORGIO DEL VECCHIO. Bologna, 1905. Pp. 192.

The term 'diritto' in Italian seems to have the same meaning as 'jus' in Latin, 'droit' in French, and 'Recht' in German. But there is no English word that can be offered as its precise equivalent. There are indeed certain contexts where it can be exactly represented by our word Law. 'Filosofia del Diritto' would be correctly translated 'Philosophy of Law'. But Law in the abstract does not convey that idea of rightness which is associated with its Continental denomination. For law may be unjust to any extent, but not 'le droit'. And the distinction so rooted in language seems to involve two conflicting philosophical assumptions. According to the Roman school all positive legislations are based more or less on a certain idea of natural justice, a recognition of human rights which they did not create, and whose existence they acknowledge. According to the English school, or, to be more precise, the school of John Austin, they represent, *as law*, the will of the sovereign, being in fact what Fitzjames Stephen called 'organised threatening'. The threats may be, and indeed generally are, expedient and just. But they may also be the contrary; and in any case what makes law law is not its relation to morality but to power.

Prof. Del Vecchio once refers to Austin, but not in connexion with this fundamental principle of legal philosophy; and, generally speaking, he ignores the English school to an extent that makes his essay uninteresting and almost unmeaning to an English reader. Himself an apriorist thinker of the neo-Kantian school, the only opponents that he recognises are the adherents of the historical school, who, as he regretfully admits, now form the majority among authoritative writers on jurisprudence. He does not dispute the value of their researches, nor even the relative justification, within certain limits, of the emphasis they lay on the relativity of law to social conditions varying widely in space and time. But this relativity, in his opinion, leaves the logical apriorism of the notion untouched. Indeed, if I understand him correctly, every concept is given *a priori*, at least implicitly, as a necessary logical postulate of reasoning, from the moment that we begin to think. At the same time these mysterious pre-existing entities are of a purely formal character, without any power over their prospective content beyond that of arranging it in some fashion or other. For the Hegelian idea of a notion which develops its content from itself is expressly excluded. Prof. Del Vecchio does not give us his opinion about Kant's unfortunate attempt to extract the particular law of honesty from the general necessity of a law of conduct for rational beings; but I presume that it would come under the same condemnation with Hegel's dialectic. It is not so clear what answer he would give to the question, Do such definitions of law as 'the command of the sovereign,' and 'organised threatening,' rank as *a priori* concepts or do they not? From the general spirit of his book I am inclined to think that he would deny them the title. But I fail to see on what principle their exclusion would be enforced.

What makes the reasonings of this author particularly difficult to follow is that he has, so far, no definition of law to offer himself. It may be reserved for a future volume, but at any rate I cannot find it here. Italian philosophers, as a rule, consider it beneath their dignity to introduce examples or illustrations; but to discuss a conception through nearly two hundred pages without ever telling what it is seems a severity of abstraction happily not often exhibited. However we learn enough about the missing definition to understand that it must neither be generalised from experience nor represent an ethical ideal. But, if so, a

science of jurisprudence reared on such a basis must be totally out of relation to practical life and progress.

Now, oddly enough, this very aloofness from practice is the most serious charge that Prof. Del Vecchio brings against the modern philosophy of law, that is to say, against the historical school, the only school he recognises as a possible alternative to his own; and more oddly still when the 'empiricists' or 'positivists,' as he also calls them, come forward as law reformers he taunts them with inconsistency (p. 149). Surely the historical school is at least as well entitled as the *a priori* school to distinguish between good and bad tendencies, to favour the one and to resist the other. The great legal reforms of the last two centuries have in point of fact been carried under positivist or inductive rather than under metaphysical influences. Here the worthlessness of mere abstract disquisition becomes particularly obvious. Let us bring philosophical principles to bear on a single controverted question of legislation—divorce, for instance, or capital punishment—and then see how far the high *priori* road will take us towards a solution. To judge by the examples of Kant and Krause it will divide into two roads, at least as regards the question of capital punishment, leading to directly opposite conclusions. And it is just this hopeless disagreement of the metaphysicians among themselves, much more than the varieties of legislative experience revealed by ethnology and history, that has gone to discredit the metaphysical method.

A. W. Benn.

Saggi per la Storia della Morale Utilitaria, II.: Le teorie morali e politiche di C. A. Helvétius. Da Rodolfo Mondolfo. Padova, 1904. Pp. 141.

The author of this essay claims with perfect justice for his hero an eminent place in the evolution of utilitarianism, especially as applied to the theory of government. As a psychologist Helvétius was one-sided, as a moralist crude and offensive. But he had the merit of transforming the principle of utility from what Hobbes had made it, a support of absolutism, to a support of popular government. In this way he rescued political liberalism from that compromising alliance with the metaphysics of abstract right and the fiction of a social contract in which it had been entangled by Rousseau, and even by Locke; thus figuring as the precursor of Bentham, who fully recognised his importance, and also of J. S. Mill, whose enthusiastic reference to him the author, I think, does not quote.

For Helvétius the great problem of education and of social organisation, the panacea for all human ills, was the identification of individual interest with the interest of the whole community. Now it is a remarkable fact, which has apparently escaped the attention of Signor Mondolfo, that in this respect he follows the method of Plato, who indeed was the true founder of utilitarianism. There are no doubt grave differences in their respective views of life and of life's highest good. But these are not more vital than the differences, well exhibited by the Italian critic, between Helvétius and his successors in the study of social science. And it would have been worthy of one so deeply interested in the history of philosophy to have traced the fundamental resemblance between the Athenian and the French reformer. Possibly the author of *De l'esprit* had never read the *Republic*. But if so Plato's influence may have reached him indirectly; and in all cases the origin of their agreement remains an interesting subject of speculation.

A. W. Benn.

Corso sistimatico di Pedagogia Generale. Da Giovanni Marchesini. Turin & Rome: Paravia e Comp., 1907. Pp. 320.

Prof. Marchesini of the Royal University of Padua has shown by his previous writings on Psychology, Ethics and Education, that on the philosophical side at least he is well qualified to undertake the difficult task of constructing a systematic course of general pedagogy. Few, if any, have succeeded in this task. The present volume deserves a place among the standard works on Education; both in arrangement and treatment it reaches a high degree of excellence.

A suggestive introduction shows how in the physical, intellectual and practical spheres progressive exercise transforms activity into ability and habitude.

Education, which has to do with this transformation, may be either natural or intentional. The eye, for example, is educated naturally by exercising its own activity, but it may also be educated intentionally and artistically till it becomes capable, popularly speaking, of recognising size and distance, and interpreting the meaning of gradations and distinctions of colour. Intentional education, in which lies the educative art, develops and completes natural education.

The factors of Education may likewise be classified as natural and intentional. Among the natural factors are included the various social institutions and the historical traditions which are reflected in them. The whole of social activity is educative—industry, commerce, arts, professions, home life, church life, city life. Society at its will turns these natural factors of education into intentional factors. For this purpose it creates and organises schools, and those other scholastic institutions which are the most conspicuous examples of educative intention. The threefold work of the schools—instruction, elevation, conformity—may be summed up in the word *adaptation*.

Society in every age claims a share in prescribing for the educator the criteria, the methods and the ends of his work. Every nation in every period of history, consciously or unconsciously, has its own educational ends, its own programmes of culture, its own criteria and methods. The teacher represents his time, as well as the collective wisdom of the ages.

But more and more in recent years have science and philosophy asserted their right to be heard on educational problems. Pedagogy aims at determining the nature, laws and ends of education. To do this successfully it must keep in touch with the progress of biology, psychology and ethics. Guided by these sciences modern pedagogy accepts as a fundamental principle the belief that *man is a psycho-physical unity*. It has come therefore to recognise that it is vain to attempt the education of mind without taking into consideration physical and hygienic conditions. A second fundamental principle which pedagogy now accepts is the *relativity of the subject to be educated*. Man is related to a physical world, a social world, and an ideal world. His education must be conducted with that fact in full view. From modern science pedagogy has also gained the concept of *Evolution*, and has learned that it is by the *progressive exercise of function* that the ability of the child is developed into the greater and fuller ability of the man.

These fundamental principles are the basis of the system of pedagogy here set forth. They underlie the four valuable chapters in which the author deals with the pedagogy of the main forms of activity—physical, intellectual, affective and practical. They can also be traced in the chapters devoted to general and special Didactics.

There is a sense of unity about the book—the various parts are in right perspective—and there is much that is fresh, bright and suggestive. It deserves to rank as one of the best text-books on the principles of Education.

JOHN EDGAR.

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W. Hoskyns-Abrahall, *Address on Child-Nature and Education, with special reference to the teaching of Health and Temperance*, London, Sherratt & Hughes, 1907, pp. 48.

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Giov. Amadori Virgili, *Il Sentimento Imperialista, Studio Psico-Sociologico con Prefazione di Errico de Marinis*, Milano, Sandron, 1906, pp. xxii, 340.

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VIII.—PHILOSOPHICAL PERIODICALS.

Philosophical Review. Vol. xvi., No. 1. **W. James.** 'The Energies of Men.' [The human individual lives usually far within his limits; he energises below his maximum, and he behaves below his optimum. Unsuspected strata of energy may be tapped by emotional excitements, by efforts, and by ideas. The influence of the first is shown by the adaptability of country people to city life, or by such experiences as those of Baird-Smith before Delhi. The influence of the second is shown by the results of ascetic discipline; that of the third, by such phenomena as Christian Science. Three problems thus present themselves: the analysis of the conceptions of mental work and mental energy; a topographical survey of the limits of human power in every direction; and a methodical inventory of keys, differing with the diverse types of individual, to the different kinds of power.] **G. A. Tawney.** 'Constitutive Consistency.' [The concept of constitutive consistency contains three demands, or three necessary forms of the objective contents of experience: continuity, discreteness or exactness, and completeness. The first of these proves to be order. All genuine orders sustain relations of one-to-one correspondence with their members, and correspond in the same fashion to one another. Thought is a process of establishing correspondences; this type of relationships makes possible certain processes of substitution which economise the energy and attention of the individual in the further activities of life. Completeness or individuality is such a relation of continuity to discreteness in the object of thought as makes this self-sustaining and infinite.] **E. Albee.** 'Descriptive and Normative Sciences.' [There are no distinctively normative sciences, in the conventional sense of that term. All sciences have to do with the real, though each regards reality from a technical, and therefore more or less abstract, point of view, that becomes in a sense normative for its own procedure. The descriptive sciences take the factual, the normative the teleological point of view; objectivity of treatment is possible to both alike. Since, however, the factual standpoint is far more abstract than the teleological, and in that proportion far less true to the nature of concrete experience, true objectivity must always, in the end, be exhibited in teleological terms. The difference, in a word, is that between explaining experience from without and from within.] **J. G. Hibben.** 'Proceedings of the American Philosophical Association: the Sixth Annual Meeting, Columbia University, New York, 27th and 28th December, 1906.' Reviews of Books. Notices of New Books. Summaries of Articles. Notes.

Psychological Review. Vol. xiv., No. 1. **W. M. Urban.** 'Definition and Analysis of the Consciousness of Value: I.' [(1) Worth predicates are the selective funded affective-volitional meanings of objects, primary and founded. Worths are said to be subjective or objective, real or ideal, actual or imputed, intrinsic or instrumental. (2) Worth

judgments express not attributes of objects apart from the subject, but rather functions of the relation of subject to object. There are three fundamental attitudes of the subject of worth judgment : simple appreciation of the affective-volitional meaning of an object for the self ; the personal attitude, in which there is explicit reference of the object to the self or the alter ; and the impersonal attitude, in which the subject becomes overindividual, and there is explicit reference of the object to the overindividual demand. So there are three groups of worth objects : objects of simple appreciation, of personal worth, and of overindividual or common worth. (3) While feeling and conation must both be included in the psychological equivalents of the worth moment, the one must take the *rôle* of actual experience and the other of dispositional presupposition. This question settled, we have to ask whether worth is coextensive with feeling, or with desire, as the case may be. (4) Feeling is the actual conscious correlate of worth predicates. And for the feeling to have that meaning called worth it must have existence meaning. (5) This presupposition of reality is not limited to existential judgment, but includes the two attitudes of presumption and assumption. (6) Primary feelings of value are feelings of personality only in the sense that there are in them certain implicit meanings which, when reflected upon, lead to their reference to the self. But these meanings take us, beyond the presuppositions of the feelings, to the conative dispositions which determined the presumption, judgment or assumption. (7) Feeling of value is thus the feeling aspect of conative process : this being taken as the total process of development, including actual and dispositional moments, by which affective-volitional meaning is acquired.] **A. H. Lloyd.** 'Some Important Situations and Their Attitudes.' [The situation implies conflict between second and first nature, formal reason and sensation, legislative will and impulse. The first moment (moral) in its development is that of assumed and asserted human sufficiency, in which nature is an object of blind fear. The second (artistic) is that of human condescension, assumed and asserted, towards nature's law, structure or organisation. The third (practical) is that of the human structure, the whole body of habits and institutions, become merely a formal or floating natural utility. The fourth (natural) is that of the human structure become a real, positively natural utility : the natural is here also the characteristically personal, and the reconstruction of nature in so far is man's volition.] **C. L. Herrick.** 'Genetic Modes and the Meaning of the Psychic.' [For us, the genetic modes find their illustrations in the psychic. But this form of self-interpretation of energy that we call consciousness may be one of an innumerable multitude of similar incommunicable experiences, which together make up the real 'meaning' of the world.] Corrigenda.

American Journal of Psychology. Vol. xviii., No. 1. **B. S. Gowen.** 'Some Aspects of Pestilences and Other Epidemics.' [Discusses the black death ; the flagellants ; the dancing mania ; the children's crusades ; lycanthropy and witchcraft ; commercial crazes, such as the Mississippi Scheme, the South Sea Bubble, and the tulip mania ; and some later religious epidemics, as exemplified in the quakers, the ranters, the jumpers, the shakers, the convulsionaries, the barkers, etc. The treatment is rather *culturgeschichtlich* than psychological. A bibliography is appended.] **F. D. Mitchell.** 'Mathematical Prodigies.' [Part i. gives a list of the more important prodigies on record, with those data in each case which shed most light on the nature and development of the calculating power. An effort is made to correct several errors which have crept into the literature ; in particular, Zerah Colburn receives more justice than has recently been accorded to him. Part ii. describes the writer's

own case. The calculating power is slight, and in itself unimportant. It is, however, described at some length in order to bring out the naturalness of the precocity involved, the gradual development of the calculating power, the important part played by counting (first in the series of natural numbers, and later in the series of multiples and powers of various numbers), the general character of the numerical properties brought to light in this way (properties which arouse the interest of the calculator, furnish the motive to continued practice, and shorten the labour of calculation), and to some extent the nature of the psychological and mathematical short-cuts used in this particular case. The part played by two-figure endings helps to explain the quick solution of problems in evolution and factoring which has often puzzled students of the subject. Part iii. discusses the data and draws conclusions. Precocity in calculation is natural and normal; owing to the origin of mental calculation in simple counting, and the complete independence and self-sufficiency of mental arithmetic, mathematical precocity differs widely from musical, still more widely from the general precocity of Ampère or Macaulay. Skill in mental calculation is independent of education and of mathematical ability. The fundamental operation is multiplication; this may remain in the counting stage, though generally a multiplication table up to 10×10 is used. The great calculator is not a man who uses the same methods as his rivals, but possesses a larger memory; the process, in the natural calculators, is a true calculation, and memory is important only in the service of calculation. Many calculators, hitherto supposed visual, prove to be of the auditory or auditory-motor type; and in general, a calculator who begins from counting before he can read and write will usually belong to this latter type. The paper ends with two appendices: the one a note on Colburn, the other a synoptic table of the chief prodigies.] Psychological Literature. Book Notes. **J. P. Porter.** 'Report of the Recent Meeting of the American Psychological Association.'

Journal of Philosophy, Psychology and Scientific Methods. iii. 25. **F. H. Rousmanière.** 'A Definition of Experimentation.' ["The only necessity for experimentation is conscious and voluntary interference with the object studied."] **F. L. Wells.** 'Linguistic Ability and Intellectual Efficiency.' [Results of experiments in the speed of reading aloud by selected subjects—'mainly negative'.] iii. 26. **R. S. Woodworth.** 'Imageless Thought.' [An important paper which argues on introspective grounds that "thought contains elements which are wholly irreducible to sensory terms. Each such element is *sui generis*, being nothing else than the particular feeling of the thought in question. Each is a quality, as red and sweet are qualities; not syntheses of sensory qualities but simply and purely the qualities of particular thoughts; they lie in the plane of content." Even where there is imagery it cannot be essential because it "is often vague when the thought is focal; or irrelevant. Therefore there is something present besides the image." "Meaning is not simply 'an aspect of all thoughts,' we do not 'mean' in general, but have in each case a particular meaning." Nor is it "a mere relation between an image and the object to which it refers". Finally, imagery is often mere "associative by-play".] **T. P. Bailey.** 'Snap Shot of a Dream Drama.' [Introspection of a nightmare.] Contains also short note by W. James in reply to Pitkin's article in No. 24. iv. 1. **F. Kuhlmann.** 'Problems in the Analysis of the Memory Consciousness.' [Seeing that experimental psychology has carried us far beyond the conception of memory as reproduced past experience, a number of problems may be formulated.] **R. W. Sellars.** 'The Nature of Experience.' [An obscure paper, which raises various current questions

without however answering any of them.] **F. C. S. Schiller.** 'The Madness of the Absolute.' [Reply to Gore's criticism in III. 21 of the paper in III. 18. Points out (1) that in a monistic philosophy partial insanity in the world must vitiate the whole, while in a pluralism it need not; (2) that the charge of madness is suggested by the empirical character of the Absolute's 'dissociations'; (3) that no method of restoring the Absolute to unity seems conceivable.] IV. 2. **A. O. Lovejoy.** 'The Desires of the Self-Conscious.' [Discusses how self-consciousness transforms desire and impulse, and points out that "the rational agent is not primarily a chooser of ends at all, but a chooser (or avoider) of personal attributes or adjectives" predicated of the represented self in a moral judgment.] **E. L. Thorndike.** 'The Mental Antecedents of Voluntary Movements.' [Denies that in a voluntary intentional movement there must be images of sensations.] **F. C. S. Schiller.** 'A Pragmatic Babe in the Wood.' [Points out the defects of J. E. Russell's illustration in III. 22 of the 'lost traveller' as a refutation of Pragmatism. "The human purpose and valuation involved in the recognition of reality have been wholly overlooked"; because it has been assumed that reality is "fully determined apart from our agency". But this was just the point to be proved.] Also a note by W. B. Pitkin in reply to James's in III. 26. IV., 3. **J. E. Russell.** 'Pragmatism as the Salvation from Philosophic Doubt.' [(1) Admitting that every theory of knowledge, whether idealistic or realistic, except the pragmatic, logically issues in philosophic doubt, can pragmatism remove this doubt? No, it can save only pragmatists, and cannot compel one to become a pragmatist. Further (2) can pragmatism postulate other reals having anything to do with each other? (3) Does not the pragmatic conception of verification involve the notion of truth as an agreement of thought with reality? (4) Does not the fulfilment of anticipation which truth brings with it imply this same notion? Hence, though the pragmatist may revel in a 'paradise' free from doubt, "there is a great gulf fixed" between him and Prof. Russell.] 'Report of the Sixth Meeting of the American Philosophical Association.' IV., 4. **A. H. Lloyd.** 'The Poetry of Anaxagoras's Metaphysics.' [His homœmeries, whole-containing parts, are manifestly paradoxical, as being the last terms of an infinite series. His Νοῦς shows the philosopher trying to meet the challenge of infinity.] **W. H. Sheldon.** 'Some Inadequacies of Modern Theories of Judgment.' [Judgment has four aspects—logical, psychological, symbolic and grammatical. The logical aspect is functional, the rest are structural, but the structure must fit the function. None of the orthodox theories throw any light on this problem.] **W. P. Montague.** 'Current Misconceptions of Realism.' [As an incident in the pragmatic protest against intellectualism the question of Realism has been revived. Idealists accuse Realism of involving (1) epiphenomenalism, (2) a belief in transcendent things-in-themselves, and (3) the epistemological dualism of a representative theory of knowledge. But it primarily asserts only that things do not depend for their existence on our knowing them, and there is no absurdity in this. Why should things change their nature when they pass in and out of consciousness? And to deny that the world is reducible to sensible objects in relation to consciousness is not to deny that it is reducible to sensible objects. As for (3) a presentative realism or pan-objectivism is possible, opposed both to dualism and pan-subjectivism.] Contains also a short reply by W. James to Pitkin in IV., 2. IV., 5. **W. T. Marvin.** 'The Nature of Explanation.' ["To explain is to analyse a whole into parts, or a complexity into elements that are simpler, and whose relations are simpler." Its pragmatic value "arises from the fact that the simpler relationships which it discovers are easier guides of conduct".] **A. C. Armstrong.** 'Individual and Social Ethics.'

[Social ethics, though valuable, have their limitations. Moral responsibility cannot be fully transferred from the individual to the group. And moral obligation is always obligation to one's self.] **H. Nichols.** 'Pragmatism *versus* Science.' [Alleges that James has said that Science has broken down, that pragmatism originates with Berkeley, and wholly despises search for the interpretation of present data of fact. These allegations are unsupported by references and seem a mere tissue of misconceptions.]

International Journal of Ethics. Vol. xvii., No. 3. April, 1907. **A. C. Pigou.** 'The Ethics of the Gospels.' [A complete ethical doctrine cannot be found there, and should not be sought. "What we may seek and do find is an unrivalled clearness of moral perception, unregarding of formulas and unfettered by tradition. To harden the parables into rules and the sayings into a canon of conduct is to confuse intuition with that reflexion about intuition which goes to make philosophy."] **C. Heath.** 'Reform and the Death Penalty.' [A plea for gradation of sentences, as the immediately practicable question in relation to the abolition of capital punishment.] **W. M. Salter.** 'The Russian Revolution.' [An inquiry into its causes and significance. The real revolutionary forces are deeper than those which in the popular mind are identified with it. Friends of freedom should aid and guide these incipient forces.] **W. R. Sorley.** 'Ethical Aspects of Economics, II.' [Economic inquiry leads to questions of ethics, both because conduct is not determined by purely economic motives and because economics deals with fact rather than with worth. Economic processes and values are subject to reinterpretation by reference to an ideal of worth expressed in moral judgments.] **F. M. Stawell.** 'Women and Democracy.' [The principles of democracy restated as giving the right attitude for the question of woman's enfranchisement.] **E. O. Sisson.** 'The State Absorbing the Function of the Church.' [The gradual assumption, by the modern State, of functions previously performed by the Church points to the final union of the two elements of power and love in one body, the Church-State.] **F. P. Griffiths.** 'Student Self-Government in the University of California.' **Amy E. Tanner.** 'The Elevation of the College Woman's Ideal.' Book Reviews.

Revue Néo-Scholastique. Février, 1907. **C. Piat.** 'Value of Human Reason.' [A discussion of Kant's *Category of Causality.*] **J. Halleux.** 'M. Sertillanges on the Existence of God.' [A criticism, somewhat captious, of the arguments for the existence of God drawn from Truth and Morality.] **P. de Ribaucourt.** 'The Nature of Dilletanteism.' ["Dilletanteism is immoral by the means that it employs, since it counts everything lawful to attain enjoyment; immoral by its end, since it turns human activity away from its proper end; immoral in its social consequences, for it substitutes selfish seeking after enjoyment for the accomplishment of social duties."] **F. van Cauwelaert.** 'Richard Avenarius.' Reviews of notable books: F. de la Mennais, *Essai d'un système de philosophie catholique*, 1830, 1831 (Paris: Blond, 1906); V. Delbos, *La philosophie pratique de Kant* (Paris: Alcan, 1905).

Revue de Philosophie. 1er Mars, 1907. **Pierre Marie.** 'The Function of Language.' [Against what he calls "the classical authors," and notably Dr. Grasset, author of *Le Psychisme Inférieur.* The celebrated physician of Bicêtre denies on his clinical experience the existence of four centres of language heretofore localised in the brain.] **N. Vaschide.** 'Experimental Researches on Divination of the Future.' [Deals with

the evidence for palmistry.] **C. Dessoulevay.** The Infinite.' [The question of Deity, infinite or finite: "we should never have this fixed notion of the relative," and chafe under its insufficiency, "if our spirit did not perceive in some sort of way the absolute".] **L. Baille.** 'The Question of Combination.' [A defence of hylomorphism.] **C. Huit.** '*Essay on the Passions*, by Th. Ribot.' [A review of an interesting book.] 1er Avril, 1907. **William James.** 'Human Energies.' [Artificial methods of whipping them up: presidential lecture at American Philosophical Association.] **A. de Gomer.** 'Autonomy of Voluntary Activity.' [An argument for the ultra-phenomenal in voluntary attention.] **A. Farges.** 'Can Methodical Doubt be Universal?' [Sets aside the Fundamental Postulate of Descartes in favour of three others.] **C. Lucas de Pesloüan.** 'The Foundations of Arithmetic.' [Builds arithmetic on other hypotheses than those of numeration. Curious and original.] 1er Mai, 1907. **William James.** 'The Current of Consciousness.' [Being the eleventh chapter of his *Psychology*.] **C. Boucaud.** 'History of Law' [*i.e.*, of Codes: "no Code is final".] **A. de Gomer.** 'Autonomy of Voluntary Activity.' [Discusses the bearing of the conservation of energy on volition, and argues "the impossibility of admitting in voluntary processes the unconditional determination of the consequent by its phenomenal antecedents, physical or mental".] **Lucas de Pesloüan.** 'Foundations of Arithmetic.' [A new logic, subversive of all that has gone before.] **P. Fontana.** 'M. Durkheim's Course at the Sorbonne.' [Origins of religion.]

Revue Philosophique de la France et de l'Etranger. 31e année. No.12. Décembre, 1906. **Adrien Naville.** 'La Morale Conditionnelle.' [Ethics supposes both a system of the obligatory ends or a moral teleology, and a theory of the best means suited to the realisation of the ideal conceived by moral teleology; this theory is properly to be called morals. Moral precepts are always conditional; they imply an "if". Duty varies according to circumstances; from the same moral teleology, we may be bound to draw categorical conclusions of a widely different, even of an opposed, character. While moral teleology remains unaltered, the morals must undergo changes. New circumstances demand that new means be used in order to fulfil the ends of old. Moreover, the theory of means grows more and more perfect. Sociology will found or at least consolidate a "rational social art," of which, however, the first basis must be the moral teleology.] **L. Dugas.** 'La Fonction psychologique du rire.' [Psychologically viewed, laughter may be defined, the impulsive substitution of a belief, itself of an impulsive character, for another. Its essential condition is an interplay of mental images repelling each other, or a series of oscillations in the spontaneous beliefs. As such, it emerges out of the depths of the subconscious self, and is an essentially involuntary, reflex, and simple phenomenon. It reveals what is in us ingenuous and spontaneous, our emotivity as opposed to our temperament and our passions, *i.e.* that which, though being superficial and unstable in our nature, may be nevertheless a "ground element" of it.] **G. H. Luguet.** 'Logique rationnelle et psychologisme.' [M. Couturat's recent criticism of psychologism is discarded as resting on an *ignoratio elenchi*; psychologism propounds an explanation of logical rules, describes the evolution, and seeks to estimate the value, of these, but does not at all bring into question either their existence or their formulæ.] Observations et documents. **V. Egger.** 'Une illusion visuelle.' Revue Générale: **G. Richard.** 'Les obscurités de la notion sociologique de l'histoire.' [A critical account of recent books on the fundamental principles and methods of sociology.] Analyses et Comptes rendus. Revue des Périodiques

étrangers. [A review of MIND, January-October, 1906.] 32e année. No. 1. Janvier, 1907. **J. J. Van Biervliet.** 'La Psychologie quantitative.' [A criticism of the psychophysical law and of the method and results of Weber's and Fechner's researches. Will be continued.] **Alexis Bertrand.** 'Esthétique et Psychologie.' [A very interesting paper on Maine de Biran's æsthetical conceptions as they may be gathered from some as yet unpublished writings. Maine de Biran was opposed both to the naturalistic theory of art and to the æsthetical idealism. His main principle in æsthetics was what he called the sentimental analogy, and he held that there is an absolute intellectual beautiful based, in the rhythmical arts, on the unity of sentiment, and, in the plastic arts, on the unity of idea and the unity of sentiment.] **A. Bayet.** 'Sur la distinction du normal et du pathologique en sociologie.' [Shows how it is difficult to decide whether a present social fact be normal or pathological, and how the criterion used by M. Durkheim is defective. Moreover, were an adequate criterion found, the distinction between the normal and the pathological would be of no practical use; we would not be entitled to take it as the principle of the rational social art.] Revue Générale: **J. Segond.** 'Quelques publications récentes sur la morale.' [A careful account of the contents of some recent books on ethical questions, especially of M. Max Wentscher's *Ethik*, vol. ii., and of M. Fouillée's *Les Eléments sociologiques de la morale.*] Analyses et Comptes rendus. No. 2. Février, 1907. **H. Robet.** 'Un Métaphysicien américain contemporain: J. Royce.' [Gives a lucid account of Josiah Royce's metaphysical doctrine, especially as expounded in his two last works: *Conception of God* and *The World and the Individual.* Royce's chief purpose in these books is characterised as being to satisfy all the requirements of modern ethics through a metaphysical theory that in itself shall adequately satisfy all the insistent demands of speculative reason. While seeking to realise the absolute intelligibility of Experience, he is anxious not to fall short of the veritable function of philosophy in neglecting this fragmentary concrete reality which is our own human life.] **J. J. Van Biervliet.** 'La Psychologie quantitative (fin).' [The author continues his historical and critical exposition of psychophysical researches (from Fechner to Münsterberg). His conclusion is that the general characters of quantitative psychology at its first stage are: the striving to solve a metaphysical problem, an absolutely false conception of the activity of a living being, the neglect of the subjective conditions, and the manifestly insufficient number of the subjects on whom experiments were performed.] **F. Le Dantec.** 'Méthodes artificielles et naturelles.' [There is a method exclusively applicable to Biology and which accordingly is to be called the natural method; it leads directly to the law of functional assimilation, of habit or heredity of acquired characters—which law could not, in its full strictness, be discovered through the artificial method. The paper is devoted to explain and illustrate the distinction between the two methods and to vindicate the natural method in Biology.] Revue critique. **Th. Ribot.** 'Le Subconscient.' [An account of Joseph Jastrow's book: *The Subconscious*, and of A. H. Peirce's essay: *An Appeal from the Prevailing Doctrine of a Detached Consciousness.*] Analyses et Comptes rendus. Revue des Périodiques étrangers.

ARCHIVES DE PSYCHOLOGIE. Tome vi., No. 3. **L. Schnyder.** 'Alcool et Alpinisme: résultats d'une enquête faite parmi les Alpinistes.' [In general, the use of alcohol is to be avoided, except for the final spurt, by way of relish or medicament, for the regulation of automatic activities after effort is over, and for the alleviation of fatigue under the same

circumstances.] **A. Lemaitre.** 'Trois cas de dissociation mentale : i. Inférences subconscientes ; ii. Rêve autoscopique ; iii. Suicide par protestation de conscience.' [The first case is that of a psychasthenic, who applies for suggestive treatment, and under hypnosis reveals the source of her discomfort and accepts guidance. The second paper reports an autoscopic dream, totally forgotten on waking, but brought to mind a few days later by a blow on the head. The third discusses a case of adolescent suicide.] **P. Bovet.** 'La vocation de Socrate : spécimen d'une application de la science psychologique à celle de l'histoire.' [Explains the Delphic oracle concerning Socrates' wisdom as a case of thought-reading between the Pythia and Chærephon ; the suggestion may have been given by an involuntary whisper, as in the Lehmann-Hansen experiments.] **E. Claparède.** 'Vision entoptique des vaisseaux rétiniens le matin au reveil.' [The phenomenon may be explained by the enhanced sensitivity of the unshaded and the lack of excitation of the shaded parts of the retina. Possibly, a part is played by the dilatation of the retinal vessels themselves.] Recueil de faits : documents et discussions. **J. L. des Bancels.** 'Pour les métapsychiciens.' [Calls attention to the experiments in which Gruhn demonstrates attractional effects which are neither gravitational nor electric.] **E. Claparède.** 'Plan d'expérience collective sur le dessin des enfants.' **W. Baade.** 'Les Congrès allemand de pédologie.' **T. Jonckheere.** 'La Ve conférence belge pour l'amélioration du sort de l'enfance anormale.' Bibliographie. Notes diverses.

The Revue des Sciences Philosophiques et Théologiques is a new periodical published in French in Belgium, under, apparently, Dominican auspices. Philosophically the most important contents of the first number (January, 1907) are (1) an article on the psychological foundations of mechanical explanation by M. de Munnynck, which points out that the ideal of deterministic reason is to reduce all things to the repose of a static equation, and that this ignores the activity and novelty of things which nevertheless exist ; and (2) a long article on 'Pragmatism and Humanism,' by M. Blanche which consists of a full and careful abstract of the whole Pragmatic controversy from 1878 to 1906, paying special attention to the articles which have appeared in Mind.

Revue de Métaphysique et de Morale. 15e année. No. 2. Mars, 1907. **E. Le Roy.** 'Comment se pose le problème de Dieu.'—i. [A searching criticism of the alleged demonstrations of the existence of God. Promises to correct negative result of this in another article. Seems to indicate that in the unrealised aspirations of man there is the germ of a really decisive proof : these may not necessitate, but constitute, the affirmation of God.] **G. Remacle.** 'Note sur le problème du Mal : Essai d'interprétation.' [Evil negation to which existence—in itself a good—has been given that it might transform itself into affirmation.] **M. Winter.** 'Sur l'introduction logique à la théorie des fonctions.' [Logistic, has an indispensable, but restricted, application in mathematics.] Etudes Critiques : 'Arthur Hannequin et son œuvre.' **J. Grosjean.** Questions Pratiques : 'Le syndicalisme révolutionnaire.' **F. Challaye.** [Suite et fin.]

Zeitschrift für Philosophie und Philosophische Kritik. Bd. cxxix., Heft 1. **Dr. A. Dorner.** 'Eduard Hartmann.' [Hartmann's philosophy is a grandiose but unsuccessful attempt to combine irreconcilable points of view, and offers through its very inconsistencies a systematised reflection of our divided and distracted age.] **Albert Bastian.** 'Quellen u. Wirkungen von Jacob Böhmes Gottesbegriff (Schluss).'

[Points out the analogies to Böhme's teaching in Descartes, Malebranche and Spinoza, and its direct influence on Schelling, Baader, Hegel, Schopenhauer and Hartmann.] **A. Meinong.** 'Über die Stellung der Gegenstandstheorie im System der Wissenschaften,' Erster Artikel. [The first of three articles defending and illustrating the author's Theory of Objects of which Mr. Bertrand Russell has given an account in No. 56 of this review. After repelling various objections to his theory, Meinong proceeds to the more interesting task of explaining the essential connexion between *a priori* knowledge and the non-existential or ideal character of its object. We are satisfied with what we know *a priori*, because it is self-evident and needs no further explanation, and such knowledge is excluded by the very nature of empirical reality. What seems to be known *a priori* in the physical sciences is in fact the non-existential element mixed up with empirical reality. All attempts to make out that geometry deals with real objects have failed. Its lines and figures are neither approximations to reality nor are they hypotheses but perfectly definite objects. The fictions of mythology and of antiquated science such as Pallas Athene and phlogiston are also objects of thought in themselves ; we do not spontaneously think of them as existing in the minds of those to whom they were realities.] **Chr. D. Pflaum.** 'Bericht über die italienische philosophische Literatur des Jahres 1905.' Rezensionen. Notizen. Bd. cxxix., Heft 2. **Anton Ölzelt-Newin.** 'Die unabhängigen Realitäten.' [Belief in a reality independent of the ego stands as high as the belief in a fixed order of nature, for it is assumed in that belief; and the same may be said of 'permanent possibilities of sensation'. Sense-impressions as colour and the like are not to be thought of as independent realities, but as somehow resulting from the action on ourselves of a second reality. It is needless, the writer thinks, to repeat the arguments for the subjectivity of space and time, as the few who question it are either ignorant of those arguments or have failed to understand them. It is not denied that there may be something objective corresponding to time, but it would no more be like time than the objective correlate of the colour red would be itself red. In a transcendent sense we may predicate difference and number of the independent realities, and also necessity, but not causation. They are of course in some way connected with our consciousness, but *how* it is impossible to say.] **W. Schallmayer.** 'Auslese beim Menschen.' [It is objected to the theory of natural selection as an explanation of man's intellectual development that high mathematical or artistic endowment does not (originally) confer any advantage on its possessor in the struggle for existence. Granted ; but that is just the reason why it occurs so seldom. That it occurs at all is probably due to the accidental evolution of peculiar faculties arising from the innumerable combinations of more general elements contained in the germ and sperm cells. It is enough that these more general elements should be of use in the struggle for existence. They will be preserved, and such of their combinations as afford the physical foundation for scientific or artistic genius will turn up with as much frequency as we find to be the case.] **A. Meinong.** 'Über die Stellung der Gegenstandstheorie, etc.,' Zweiter Artikel. [In this article, Meinong supports the thesis that there is such a thing as *a priori* knowledge at great length and with a formidable array of reasonings. Those who maintain the contrary do not, in his opinion, sufficiently distinguish between the suggestion of a truth by experience and its establishment by experience. For instance it is irrelevant to observe that the equality of the angles of an equilateral triangle would not have occurred to any one without inspecting the figure itself. The important thing is that the equality is proved and can only be proved by *a priori* reasoning. Nor do what are called thought-experi-

ments justify the derivation of geometrical truths from experience. For the figures present to the mind's eye are no more accurate than the figures drawn on paper; they are even less accurate. What these alleged experiments really do is merely to enable us to realise the conditions under which *a priori* intuitions come into play. Finally the possibilities of non-Euclidian geometry do not legitimate an appeal to experience on the question whether for instance the axiom of parallels is true or not. In the space of sense-experience we may be sure that what we call parallel straight lines will meet if they are produced far enough. That, however, is simply because our senses are incapable of detecting their slight convergence at the beginning. But that ideal parallels should ever meet is absolutely inconceivable. The results of the geometry of spherical and pseudo-spherical space do not concern plane geometry nor can they upset its conclusions.]

Zeitschrift f. Psychologie. Bd. xliii., Heft 3. **E. von Aster.** 'Beiträge zur Psychologie der Raumanschauung.' [An attempt to furnish a purely descriptive psychology of the visual perception of the third dimension, on the lines of Schumann's work with optical illusions. The author begins with an account of various 'forms of apprehension,'—grouping (*Vereinheitlichung*), preference by attention (*Beachtungsrelief*), successive or simultaneous perception, etc. He then describes the introspective data obtained from simple geometrical figures, viewed perspectively in monocular vision, without aid from secondary criteria. Plastic or tridimensional vision implies the successive traversing of the figure by the attention, a tracing-out of its horizontal lines, a disregard of the character of the surfaces included by acute and obtuse angles, and a preference by attention of the nearer parts. This, then, is the particular 'form of apprehension' in spatial perception; and a genetic consideration shows that spatial perception, especially as involving the use of the two eyes, makes the employment of such a form inevitable. As regards the issue between empiricism and rationalism, the author inclines to believe that his spatial 'form of apprehension' may replace the 'depth sensation' of the nativists.] **S. Jacobsohn.** 'Über subjektive Mitten verschiedener Farben auf Grund ihres Kohärenzgrades, II.' [Continues the discussion of factors influencing judgment: expectation, fatigue, practice, over-conscientiousness, etc., and considers the effect of memory upon the magnitude of the average deviation. An appendix contains tables showing the experimental results.] Literaturbericht.

Archiv für Systematische Philosophie. Neue Folge. Band xiii., Heft 1. **Max Frischeisen-Köhler.** 'Über die Grenzen der naturwissenschaftlichen Begriffsbildung.'—II. [Concludes, with the consideration of the Individual and Universal Concepts in History, a critical estimate of Rickert's Methodology. It constitutes no substantial advance over Dilthey, Sigwart, Wundt. Rickert's neglect of Analysis.] **Branislav Petronievics.** 'Über die Wahrnehmung der Tiefendimension.' — II. [Endeavours to show that "das Helle," upon which our perception of depth depends, is a distinct visual sensation.] **Marie Joachimi-Dege.** 'Das Wesen des menschlichen Seelen- und Geisteslebens.' [Concludes a very laudatory account of Surgeon-General Kern's Psycho-physical Parallelism.] **R. Seligmann.** 'Der ökonomische Güterwert als Wille zur Arbeit.'—II. [Value lies neither in needs alone, nor in work represented in objects, but in the Will to Work.] **Ernst Fischer-Planer.** 'Vererbung psychischer Fähigkeiten. Zugleich eine Entgegnung auf: Ein neues Argument gegen den Materialismus.' [Called forth by Viktor

Stern's article in *Archiv*, Heft 3, 1906. Endeavours from a materialistic and monistic basis to give an account of consciousness, sensation and will, and of the psychical qualities which may possibly be inherited.] **Walter Kinkel.** 'Zum "kritischen Idealismus".' [Accuses Richard Skala of quite misunderstanding Critical Idealism.] **Albert Sichler.** 'Über falsche Interpretation des kritischen Realismus Wundts: und Beurteilung von O. Pfisters kritischen Transzendental-Realismus.'—I. [An effort to defend Wundt from misinterpretation, particularly Pfister's. Includes a succinct account of Wundt's Epistemology.] Bericht über Rechtsphilosophie aus den Jahren, 1899-1906. Von Dr. jur. Fritz Berolzheimer.

Vierteljahrsschrift für Wissenschaftliche Philosophie und Soziologie. Jahrgang xxxi., Heft 1. March, 1907. **Richard M. Meyer.** 'Der Ursprung des Kausalitätsbegriffes.' [The conception of Causality arises so soon as temporally related processes can be regarded under the analogy of Space.] **Kurt Geissler.** 'Das Willensproblem: Historische Übersicht u. Darstellung durch Weitenbehaftungen.' [Twenty-two pages of historical survey. Fourteen pages devoted to show the importance for this problem of certain concepts of the higher mathematics. Concludes that the human will may be really free through qualities accruing to it from its connexion with a higher order (Weitenbehaftungen).] **Georg Wernick.** 'Der Wirklichkeitsgedanke.' 4. Artikel. [Discusses among other things the negative judgment.] **Paul Barth.** 'Die Geschichte der Erziehung in soziologischer Beleuchtung.'—VI [Origin of the Universities, Theory of Education in the second half of the Middle Ages, etc.] Besprechungen. Bibliographie, etc.

Rivista Filosofica. Anno viii., vol. ix., Fasc. iv., September-October, 1906. **E. Juvalta.** 'Per Carlo Cantoni.' [A brief but graphic tribute to the lamented editor of the *Rivista* for whose death this number is in mourning.] **A. Faggi.** 'Gli albori della Psicologia in Grecia.' [Two philosophies of mind sprang from the primitive animism of early Greek thought, the materialism of Democritus and the spiritualism of Anaxagoras.] **G. Zuccante.** 'San Bernardo e gli ultimi canti del Paradiso.' [The last eight cantos of Dante's *Paradise* are evidently inspired by the mystical theology of St. Bernard, with which there is otherwise good reason for believing the poet to have been acquainted.] **G. Vidari.** 'Il moralismo di Kant.' [Kant has partly impoverished, partly distorted morality by subjecting it to his critical philosophy; and Fouillée's objections to his system are well founded. But to admit, as Fouillée seems to do, that the law of duty has an ideal content, involves us in the recognition of transcendent realities.] **G. Della Valle.** 'La fase attuale della Psicologia sperimentale ed il Congresso di Würzburg.' [The writer looks forward to a time when dualism, which has already disappeared from the world of Nature and from pure epistemology shall be also expelled from psychology. But it remains for the experimental method to explain the bipolarism of subject and object with which introspection is still afflicted.] Rassegna Bibliografica, etc. Vol. ix., Fasc. v., November-December, 1906. [This number is principally devoted to commemorating the services to philosophy of the review's late editor, Prof. Carlo Cantoni.] **G. Celoria.** 'Sulla bara dell' amico.' [A brief address delivered at Cantoni's funeral and giving an outline of his laborious career.] **G. Varisco.** 'C. Cantoni e la teoria della conoscenza.' [Cantoni developed Kant's philosophy in the direction of giving a larger place to experience. The reviewer, who is a positivist, argues for still greater concessions in the same sense.] **A. Faggi.** 'Cantoni e Vico.' [Agrees with Prof.

Flint that Cantoni did less than justice to Vico's metaphysics.] **G. Vidari.** 'La morale di C. Cantoni.' [Cantoni differs from Kant by introducing an element of disinterested feeling into the moral law, by denying that freewill contradicts the law of causation, by interpreting the consciousness of duty as direct evidence of the existence of God, by excluding happiness from the supreme good, and by making human immortality a simple consequence of the moral order.] **A. Piazzi.** 'Carlo Cantoni e l'educazione nazionale.' [Cantoni thought that students should be examined by government delegates instead of, as now in Italy, by their own teachers, and that university students should pay the professors whose lectures they attend.] **G. Villa.** 'Filosofia e Scienza.' [Science is not identical with philosophy. The one represents analysis, positive research, definite and precise knowledge; the other represents synthesis, the discussion of problems, and hypothetical knowledge. The minds of Italian youth are now being corrupted by the fashionable method of pragmatism and mysticism which teaches them to deny the existence of any settled truth.] **G. Zuccante.** 'S. Bernardo e gli ultimi canti del Paradiso *(contin. e fine)*.' [Concludes the evidence of Dante's debt to St. Bernard.] Rassegna Bibliografica, etc. Anno ix., vol. x., Fasc. i., January-February, 1907. **P. Martinetti.** 'La funzione religiosa della filosofia.' [Philosophy aims at embracing the totality of existence in a single view, and that not for the sake of gratifying an idle curiosity but under the impulse of a passionate desire to live in the Whole, to blend our souls with the soul of the great All. It contributes to the progressive exaltation of religious belief, partly as negative criticism, by destroying the inadequate conceptions of the past, but still more by preparing the higher ideals of future faith.] **B. Varisco.** 'Quid est veritas?' [The practice of Christian nations is not such as to prove that their morality can only be explained by the intervention of a supernatural agency. And in fact Christian morality, though pure and high, is not the highest conceivable. It is based on the search for individual felicity. Now that is not an element in the moral value of life, which on the contrary rather excludes it.] **A. Piazzi.** 'La Ginnastica dello spirito nelle pedagogia del secolo XIX.' [The ideal of eighteenth century education was so to train the pupil that he might be able to secure his individual happiness in after life. Kant destroyed this false endemonism by his categorical imperative, and Fichte destroyed the individualism which still survived by the idea of nationality embodied in his *Addresses to the German People*. But the notion of education as a course of intellectual gymnastics long survived. It is now definitely superseded by the modern theory that each successive generation should be enabled to appropriate and transmit the ideal possessions of society.] **A. Pagano.** 'Filosofia e Filosofia del Diritto.' [Chiefly a protest against the divorce of jurisprudence from ethics and its reduction to a historical study.] Rassegna Bibliografica, etc.

IX.—NOTES AND NEWS.

SYMBOLIC LOGIC (A REPLY).[1]

The differences between Mr. Russell's views and mine are mainly due, I think, to the fact that we reason from different data, because we do not always attach the same meanings to some words which are vital to the questions at issue. There is, for example, the word *proposition*. With me a proposition is simply a conventional arrangement of words or other symbols employed to convey information or express a judgment. Since exactly the same arrangement may sometimes convey true information and sometimes false information, it necessarily follows from my very definition that the same proposition may be sometimes true and sometimes false. I do not say that the same *information* may be sometimes true and sometimes false, nor that the same *judgment* may be sometimes true and sometimes false; I only say that the same *proposition*—the same *form of words*—is sometimes true and sometimes false (see MIND, vol. xv., No. 60, pp. 515). What Mr. Russell calls a *propositional function*, I should prefer calling a *functional proposition;* but whatever locution we adopt, it must, from my point of view, be classed as a proposition. Hence, any formula of mine, as, for example,

$$A^{\epsilon}\, B^{\theta} + A^{\theta}\, B^{\epsilon} : (AB)^{\theta} : A^{-\eta} B^{\theta} + A^{\theta}\, B^{-\eta}$$

remains true whether or not A and B denote simple propositions or complicated functional propositions. Mr. Russell says that:—

"Logic ought not to be concerned with forms of words, but with what such forms mean; hence it is essential that logic should employ only forms of words which are unambiguous, and when this is done 'variable' statements disappear".

I think logic should take account both of form and meaning. A statement may be a variable (in my sense of the word) and at the same time perfectly unambiguous. The variable statement, "Mrs. Brown is not at home," may be perfectly unambiguous in the morning when it conveys true information, and in the afternoon when it conveys false information.

With reference to the "null" class and "the existential import of propositions," Mr. Russell regrets that I have nowhere in my book discussed the meanings of the word *existence*. Such a discussion might have led me far into metaphysical subtleties; so, to avoid obscurity, I have left the meaning of the word, wherever used, to be gathered from the context. In symbolic logic, as in ordinary speech, much must often be left to context. The combination of brevity with clearness is the soul of useful symbolism, and this combination cannot generally be secured without leaving much understood. I think I may fairly refer to the abbrevi-

[1] See Mr. Russell's review in MIND, April, 1906, and Mr. Shearman's recent criticism in his *Development of Symbolic Logic*.

ated notation of my *Calculus of Limits* (explained at the end of my *Symbolic Logic*) as a good illustration of this principle.

The words *real* and *unreal* might sometimes with advantage replace the words *existent* and *non-existent*. Realities and unrealities are mutually exclusive classes. The convention that, in symbolic logic, the latter shall be denoted by the symbol 0, and the former by the symbol e, and that their individual members shall be denoted by 0_1, 0_2, 0_3, etc., in the one case, and by e_1, e_2, e_3, etc., in the other, is convenient in practice and logically unassailable. Doubts may arise as to whether a particular entity should be classed as real or unreal; but this does not affect the validity of any of my formulæ. The statement $A^o + A^e$, for example, is always true whether A is real or unreal. Another word to which Mr. Russell attaches a meaning different from that which I give to it is the word *imply*. In his footnote (p. 259), he says that "false propositions imply all propositions". This is not necessarily the case as I understand the words *false* and *imply*. With me *impossible* propositions imply all propositions; but a *variable* proposition (whether true or false in a particular case) cannot imply an impossibility. That is to say, the implication η : A is necessarily true whatever A may be; but the implication θ : A is self-contradictory when A is an impossibility, whether θ represents θ_7 or θ_i (see MIND, pp. 513, 514).

Mr. Russell also objects to my introduction of unmeaning statements, which I also represent by the symbol 0. He says that "in logic, we ought to adopt such a language, and such rules for its employment, that unmeaning phrases shall not occur". I agree that we ought so far as possible and convenient; but it is not always possible, and when possible, it is not always convenient. The rules which should regulate the employment of unmeaning symbols are discussed in my book (see pp. 97-100).

Let me now say a few words in reply to Mr. Shearman's criticism in his recently published book, *The Development of Symbolic Logic*. On page 166 he charges me with self-contradiction on the ground that I speak of two universes of discourse. The simple answer to this is that neither in my papers in MIND, nor in my book, nor elsewhere do I anywhere speak of two universes of discourse. I speak of *one* "Symbolic Universe," or "Universe of discourse," which may consist wholly of realities, or wholly of unrealities, or which may be a mixed universe containing both. He also says that I make "unjustifiable assumptions" when, with reference to a particular illustration which I gave in MIND, I take for granted that "no round squares are real," and that "all triangles are real". To this I can only reply that these assumptions appear to me to be perfectly justifiable. We have all seen and drawn triangles; but a "round square" is at present meaningless. In the course of the future evolution of English, our descendants may some day apply the term to some reality, and then it will cease to be unreal; just as a *horseman* does not now mean an unreal combination of *horse* and *man*, like a centaur, but a real man riding on a real horse. Similarly, we may arbitrarily or by accepted convention apply the word *triangle* to something unreal; but all this is an idle play upon words which it would be waste of time to pursue further. Words must often be interpreted by context.

Mr. Shearman should have read my definitions of my symbols and technical terms more carefully before he undertook to question the validity of my formulæ. The symbol $A : x$ and its synonym $(A' + x)^e$ should be read "A implies x"; not, as he translates it, "it is certain that A implies x" (see his book; pp. 29, 30). The statement "it is certain that A implies x" has quite another meaning; it is of a higher degree, and would be expressed in my notation, not by $A : x$, but by $(A : x)^e$, or its synonym $(A' + x)$. Of course, I exonerate Mr. Shearman from wilful

perversion of my meaning; but his mistranslation here is unfortunate. In a magazine review it would be of less consequence, as it might be rectified in the following number; but in a book which professes to be a serious "critical-historical study of the logical calculus" it is much less excusable. Mr. Shearman, adopting the views of Mr. Johnson and of some other logicians, but not, I believe, of the majority, says that it is wrong to speak of a proposition as sometimes true and sometimes false, or as being *often* true, for that "on each supposed occasion of its truth there would be a new proposition". He thinks that those who, like logicians in general, differ from him upon this point err "through the confusion of proposition with event". He admits that "the probability of an event is certainly measured by the ratio of the number of cases in which it occurs to the whole number of cases considered"; but he maintains that "the probability of the truth of a proposition has no meaning". Now, in admitting that an event may occur *often* he surrenders his whole case. To make this palpable let me confute his reasoning by a *reductio ad absurdum*, of its central principle. If, as he says, it is a mistake to speak of a proposition as being *often* true, since on each occasion of its truth there would be a new proposition, might we not similarly, and with far more plausibility, argue that it is a mistake to speak of an event as *often* happening, since on each supposed occasion of its occurrence there would be a new event? If Mr. Shearman is not prepared to admit the validity of the second argument, how can he consistently advance the first?

Why does Mr. Shearman say that I maintain that "symbols should be employed exclusively to represent propositions"? The context shows that by "symbols" he means letters—a separate letter for each proposition. Now, the very first chapter of my book opens with the definition that "The symbol A^B denotes a proposition of which the individual A is the subject and B the predicate". And in the mathematical applications of my system of notation, as in my *Calculus of Limits*, single letters stand much more frequently for numbers and ratios than for propositions. I maintain throughout that our notation should always be adapted to the nature of the problems treated; not the problems to any cast-iron system of notation.

HUGH MACCOLL.

P.S.—Mr. Shearman's note in the April number of MIND, which I had not seen when I wrote the preceding, requires a brief reply. "To say that a proposition is certain," according to Mr. Shearman, "means that *all persons are so constituted that they must believe that the proposition is true.*" Now, all text-books on trigonometry assert that the ratio which the circumference of a circle has to its diameter lies between 3·141 and 3·142. I hold that this assertion is a *certainty*, and that it would remain a certainty even if every living human being (Mr. Shearman and I included) believed it to be false. Mr. Shearman, if he sticks to his definition, must hold that it is *not* certain, because a few crazy circle-squarers here and there do not believe it. I once saw a good-sized volume written by a certain Mr. Smith to prove that the exact ratio is 3·125. Should mathematicians, in deference to Mr. Smith's opinion, regard the statement ($\pi = 3{\cdot}125$) as *possible?* Mr. Shearman apparently thinks they should.

Mr. Shearman on page 144 of his *Development of Symbolic Logic* speaks of "the smallness in the number of Mr. MacColl's contributions to the creation of a useful Calculus," and throughout his whole criticism he maintains that my symbolic system can solve no problems which cannot be dealt with by the ordinary symbolic methods. Now, my earliest contribution to logic is my *Calculus of Limits* which I briefly explain in the

concluding chapters of my *Symbolic Logic and Its Applications*, a book to which Mr. Shearman refers in his recently published volume. This *Calculus of Limits* was published in the *Proceedings of the London Mathematical Society* in 1877, under the title of *The Calculus of Equivalent Statements and Integration Limits*. From the logical principles therein laid down flowed all my subsequent researches. By a general symbolic process this calculus solves with ease, though not always briefly, various kinds of problems in mathematics which (except in very simple cases) cannot (so far as I know) be solved in any other way. This calculus Mr. Shearman entirely ignores. Will he allow me, in all courtesy, to put to him the following pertinent questions: Does he know of any other general symbolic method that can deal with the same classes of problems? If he does, will he kindly show how the method can be applied to the last two problems in my recently published book? And with regard to the ordinary traditional logic, does he know of any other symbolic system that, like mine, first corrects a fundamental error running through all syllogisms as usually written, and then supersedes the so-called "canons" of the ordinary text-books by one simple and easily applied formula? It is true that this formula is founded on my division of statements into *certainties*, *impossibilities*, and *variables*, and that, like mathematical formulæ, it is wholly independent of psychology—two revolutionary innovations in formal logic which Mr. Shearman has evidently made up his mind never to accept.

NOTE IN REPLY TO DR. FAIRBAIRN.

Before offering some remarks on such of his criticisms as seem to betray a misconception of the relevant facts, I wish to thank Dr. Fairbairn for the kind words with which he concludes his review of my *History of English Rationalism in the Nineteenth Century*. If so distinguished a representative of religious thought has found my book "interesting" and "instructive," and if I may take him as representing a class, the hopes expressed in my Preface have been amply fulfilled.

In reference to the long discussion about the meaning of the words "rationalism" and "dogma," which occupies about three-fifths of the review, I might say a good deal, but must forbear, all my space being required for points admitting of a direct appeal to facts.

"Scarcely a man here named" [in my *History*], says Dr. Fairbairn, "began to be in the nineteenth century" (p. 274). Such an assertion takes away one's breath. I have read the sentence over and over again to make sure that my eyes did not deceive me; I have consulted a keen-sighted friend who assures me that the words stand as I have quoted them; I fear there can be no mistake. Yet my Index contains over seventy names, mentioned in connexion with the rationalistic movement, of English writers who "began to be" or, in ordinary language, were born within the century.

"Those that do" (*sic*), continues Dr. Fairbairn, "are characteristic only so far as they are formed by other than English or native influences." I can make no grammar and little sense of the first three words, the first example given being Coleridge, who was born in 1772. But presumably the reviewer means that the English rationalists named by me who did "begin to be" in the nineteenth century without exception got their rationalism from foreign sources. If so against this hardy assertion I set the names of Charles Hennell (who impressed Strauss as eminently English), F. W. Newman, W. R. Greg, Buckle, Herbert

Spencer, Huxley, Clifford, Romanes (in his rationalistic period), J. R. Green, Mr. John Morley (who seems to have been converted by Greg and Mansel), Holyoake, and Bradlaugh. That makes a round dozen, and the list could be extended.

"Nothing is said to explain the influence of Kant's works [on English thought] either as original or as recent." Who would imagine on reading this that I had given a summary of Kant's philosophy from the theological point of view; that I had traced his influence on Coleridge; that I had defined the extent of Hamilton's indebtedness to him; or that I had shown how the character of the English genius renders it peculiarly fitted to accept an agnosticism largely based on Kant's *Critique* (vol. ii., p. 201 *sqq.*)?

"Strauss is credited with introducing to us the knowledge of Hegel, though Baur did more to introduce him than even his brilliant pupil." As it happens, Strauss came first, having been read in England long before Baur, whose Gospel-criticism is much later than that of his "brilliant disciple"; and Hegel once introduced could take care of himself; G. H. Lewes reviewed his *Æsthetics* in the *Westminster* in 1842; and Jowett began to study him in 1844, two or three years before he took up Baur.

"Nor is anything said about Holland, though there is a brief reference to the French translation of Kuenen." My reference is not to the French translation as such but to Renan's Preface to it. I recognise Kuenen's position fully in pointing out the decisive direction given to his criticism by reading Colenso's First Part (ii., 143).

A singularly obscure reference to Collins's definition of Free-thought seems to insinuate that I ignore the dependence of Collins on Locke, whereas I expressly mention it. Dr. Fairbairn becomes clearer when he quotes me as saying that "the leading Free-thinkers were Whigs," adding, "left to myself, I should have said they belonged to the opposite section of political thought. His evidence is mainly taken from their adversaries. What Pope and Bolingbroke, what Hume and Gibbon were in politics we know; and it is a great mistake indeed to attribute a later temper to an earlier time." I make no such mistake, and the charge is simply scandalous. The words quoted are indeed mine, but the qualifications accompanying them are omitted. What I really say is as follows: "The leading free-thinkers of that period [1713]—or at least the declared ones—were Whigs; although some distinguished Tories such as Pope and Bolingbroke were known to hold the same opinions in private. Swift takes advantage of this circumstance . . . to saddle the whole Whig party with the odium of rejecting the popular religion" (i., 121).

At the time of which I am writing the leading avowed free-thinkers were Shaftesbury, Toland, and Collins. All three were Whigs. So was Tindal, then not yet famous, but not unknown. My evidence about their political opinions is *not* mainly taken from their adversaries but from their biographies.

It is alleged that I "give a list of writers of the eighteenth century, and infer that literature was mainly Irish, Scotch or Continental. This," adds Dr. Fairbairn, "is surely a mistake, when we have men like Pope, Addison, Berkeley, Fielding, Gibbon, and, rounding off the century, Johnson. If we go with Arbuthnot into Scotland we shall find Thomson, Robertson, Hume, Boswell, Smollett." Noting incidentally that Berkeley was not English but Irish, I protest against this utter perversion of my meaning. I make no such list and draw no such inference. Speaking solely of the Queen Anne period, I infer (rightly or wrongly) "a relative sterility on the side of the mother country" from "the surprising number of Irish writers," giving in a note the names of Swift, Berkeley, Steele, and Farquhar. I also mention that Congreve was

educated in Ireland, that Vanbrugh was of Flemish extraction, and Arbuthnot a Scotchman (i., 118). None of the Scotch writers mentioned by Dr. Fairbairn came into literature until a good while after Queen Anne. The isolated mention of Arbuthnot might surely have opened his eyes to the sufficiently obvious fact that I was occupied solely with the time when Collins's *Discourse* appeared. Not content with making mountains out of molehills he makes them out of valleys.

"Mr. Benn's account of 'Positive' and 'Positivism' is more popular than scientific. The term is to be understood through Roman Law which opposed the *Jus Positivum* to the *Jus Naturale* rather than through any analysis of the positive man." Dr. Fairbairn must excuse my saying that he is quite mistaken. He will admit, I hope, that Littré in his double capacity as a Comtist and an etymologist knew something about the matter. I open his Dictionary at the word "positif"; I find it defined, to begin with, as "qui est assuré," then secondarily as "qui s'appuie sur les faits"; and in this connexion he explains that Comte's philosophy is called "positive," as professing to emanate from the sciences that are based on facts. Then he specifies, as I have done, the use peculiar to French of positive as opposed to imaginative and ideal. Afterwards comes a quite distinct section explaining the legal use of "positif" as opposed to "naturel," and here there is no reference to Positivism. Indeed so far is there from being an antithesis between "positive," in Comte's sense, and "natural," that Comte himself points out a considerable analogy between his philosophy and what the English since Newton understand as natural philosophy; while Littré again in his Introduction compares Comte's classification of the Sciences to the natural as distinguished from the artificial systems of botany and zoology. Thus Dr. Fairnbairn's etymological clue leads off on a false track. If that is a specimen of his "scientific" method, I prefer being "popular".

Had such unfounded criticisms appeared anonymously in a weekly religious journal, they might have been let pass unnoticed. Appearing in MIND under an authoritative signature they might damage my credit as a historian if I did not show on what sort of basis they rest.

ALFRED W. BENN.

SOME REMARKS ON A RECENT FOOT-NOTE BY MR. BRADLEY.

In a foot-note on page 172 of the last number of MIND Mr. Bradley seems to reiterate his former claim (N.S., No. 55, p. 439) to have answered by anticipation, in his *Appearance*, my criticism (N.S., No. 54) of his doctrine of the "Absolute Criterion". But he maintains a complete, if not unintelligible, silence in regard to the fact that in N.S., No. 57, page 141, he was challenged to produce "any passage or passages in the pages he now refers to in which the main objection I have urged has been even so much as recognised". In that short reply I further took the trouble of condensing the said objection as follows: "The gravamen of my criticism lay in this, that whereas Mr. Bradley had asserted that the principle of contradiction affords an absolute criterion for distinguishing appearance from reality, I pointed out that self-contradiction is only foreign to reality in so far as it is foreign to appearance as such".

To excuse one's self from directly answering an adverse criticism by claiming to have answered it already, and then, being exhorted to state

how and *where*, to ignore the exhortation but repeat the claim—surely this is a strange manifestation of one's anxiety "to be of use to all the world"?

HOWARD V. KNOX.

MIND ASSOCIATION.

THE Eighth Annual General Meeting of the Association was held on 1st June, in Corpus Christi College, Oxford. The financial position of the Association was considered, officers were elected, and it was resolved that next year's meeting should be held at Cambridge in May or June.

The following have joined the Association since the printing of the last number:—

Dyer (Mrs.), 68 Banbury Road, Oxford.
Ross (G. R. T.), The Mount, Highfield Crescent, Southampton.
Spencer (C. N.), Walden, Tatsfield, Surrey.

Those who wish to join the Association should communicate with the Hon. Secretary, Mr. HENRY STURT, 5 Park Terrace, Oxford; or with the Hon. Treasurer, Dr. F. C. S. SCHILLER, Corpus Christi College, Oxford, to whom the yearly subscription of one guinea should be paid.

Members resident in U.S.A. may, if they choose, pay their subscription ($5) into the account of the Treasurer (Dr. F. C. S. SCHILLER) at the Fifth Avenue Bank, corner of 44th Street, New York, U.S.A.

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

I.—M. RIBOT'S THEORY OF THE PASSIONS.[1]

By Alexander F. Shand.

I.—M. Ribot's Distinction between Passions and Emotions.

Now that the conception of System has become so prominent in men's minds and has been applied fruitfully in many different fields of research, it is time that some psychologist should study the Passions,—the most important and comprehensive systems of the human mind itself. The ordinary psychology of the text-books, which is chiefly analytical in method, cannot do justice to these systems. They are dispersed, where they are not lost sight of, in special studies of sensations, perceptions, and other intellectual processes, as well as in the separate treatment of the feelings and will. A new synthetical psychology is needed to deal with them. For they comprehend the fundamental elements and processes of the mind. They are its epitomes: the most important of the many selves which each of us contains.

In a subject on which it is so easy to write vaguely and repeat platitudes, and so difficult to advance on the general knowledge of literary men and the great observers of character, and to test and systematise their knowledge and raise it to the standard of science, it is fortunate that the work should have been undertaken by so eminent a psychologist as Prof. Ribot. M. Ribot would not indeed suppose that he had created a new science, though there is here a new science to be created. His object seems to have been to

[1] *Essai sur les Passions.* Par Th. Ribot, Paris, 1907 (Felix Alcan).

survey the ground rapidly, to bring together all the chief passions, to distinguish them from the emotions, to give an account of them, not indeed adequate, but true as far as it goes, and to trace them to their roots in our innate disposition or temperament. He has done a service to science in giving to the world his essay on 'The Passions,' as a solitary pendant to the many works it already possesses on the emotions. He has facilitated the work of those who come after him, and has initiated an enterprise that is sure to be continued.

M. Ribot limits his inquiry to three leading questions: "How the passions arise; how they are constituted; how they come to an end" (p. 8). The term 'passion' had almost fallen into disuse, supplanted by the term 'emotion,' for which, M. Ribot thinks, we in this country are chiefly answerable (p. 3). Yet the new term has not been used with any greater precision than the old one. It fluctuates from one writer to another, and no one knows what it does or does not include. It may be defined as that which moves us to action, or as a feeling with an abrupt commencement, a culmination and gradual decline; or as any intense feeling, however initiated, that has an object and is not merely a bodily pain or pleasure; or we may use it to denote fear, anger, joy, sorrow, surprise, disgust and many other secondary and derived emotions, whatever their degree of intensity or duration, so long as they possess the same quality of feeling and the same characteristic tendencies, that is so long as they can still be identified as fear or anger or joy or sorrow, etc. This is perhaps the use of the term to be preferred, because it makes the quality and tendency of the feeling the predominant consideration, and leaves its vague and varying intensity to be indicated by some phrase or adjective; for a term which expresses only an indefinable intensity and instability of feeling is not fitted for use in science. Thus in this sense we can have either intense or faint emotions, and either momentary or prolonged ones. There are angers that brood in the mind for days or weeks, and faint but oppressive sorrows that cannot be cast off. But this sense of the term is very different from that of M. Ribot. "Emotion," he says, "is defined in two principal characteristics: intensity, brevity" (p. 6). It commences by "a shock, a rupture of equilibrium" (p. 6). This view seems to rest on a confusion between the emotions that are generated with surprise,—which both gives them an abruptness of feeling and, as Adam Smith observed,[1] heightens

[1] *Hist. of Astronomy*, ch. i.

their intensity,—and others that have a diverse origin,—as those that are accumulated by slow degrees and drop by drop, until the anger or the sorrow cannot any longer be repressed, and those which are borne gently and familiarly on the stream of our thought,—the old regrets and hopes and disappointments that assail us as we project ourselves into the past or future.

In attempting to restore the other term, 'Passion,' to its use in science, M. Ribot rightly gives to it a more restricted signification than that in which it was understood by Descartes, Locke, and Hume. It will no longer denote the emotions of Fear, Anger, Joy, Sorrow and Surprise, as in the lists of these writers, but it will be confined to the more complex and stable feelings, as Gluttony, Drunkenness, Sensuality, Ambition, Avarice, Love of gambling, adventure and sports, political passion, Patriotism and Religion. We must approve of this attempt to find some term to express these chief systems of character and to distinguish them from individual emotions, and the term 'passion' is probably the best, if not the only term in the French language that could be used for this purpose; whether it is the best term in ours is open to question. In attempting several years ago to interpret these same systems I adopted the term 'sentiment' as on the whole the most suitable term in English to express them.[1] The French term 'sentiment' does not correspond to this, has a wider signification, and is nearest in meaning to our term 'feeling'. But passion in English means a violent and uncontrolled feeling. Thus we speak of 'a passion of grief' or of rage. On the other hand, when we speak of a 'master-passion' we are not thinking so much of a violent emotion as of a principle of character of predominant strength and persistence, such as the passion of gambling or of ambition may become. Thus in either case 'passion' means something having predominant strength, though in the one case this may last for only a few minutes and in the other for the greater part of a life-time. Now it is just this conception of predominant strength without relative stability that we do not want to suggest as the essential character of this class of facts. On the contrary we want a term that shall suggest relative stability in all cases without the conception of predominant strength. For the characters in which two or more passions compete with and restrict one another, as party-passion and patriotism, or religion and

[1] "Character and the Emotions," MIND, N.S., vol. v., p. 217 *et seq.* See also *Manual of Psychology*, G. F. Stout, bk. iv., ch. ix., § 5.

sensuality, or sexual love and ambition, are much more numerous than the characters in which one passion has freed itself from all control and obtained the mastery. And on the other hand sensuality, avarice, ambition and religion show a relative stability in comparison with most emotions. Thus the term 'passion' is unsuitable because it does not suggest relative stability and does suggest predominant strength. In contrast to it, the term 'sentiment,' in one of its senses in English, does suggest something relatively stable in comparison with emotion without implying either violence or predominant strength. Thus we speak of the 'moral sentiments,' the æsthetic sentiment, the family sentiment.

This term has also another superiority to the term 'passion': it implies a higher intellectual development. Now there is no more striking difference between emotions and sentiments than the poverty or irrationality of thought of the one and the comparative richness and rationality of thought of the other. In joy we are apt to repeat the same foolish exclamations, 'How delightful,' 'How beautiful'; in sorrow the same laments; while violent anger to its sterility of thought joins such a degree of irrationality that it has been called a short-lived madness. But in pride and avarice the higher processes of thought are involved, as essential to their organisation, and in some, as the love of knowledge or art, the highest; while even the love of the pleasures of the table has a superior intellectual development to the corresponding appetite. Thus the term 'sentiment' is better adapted than the term 'passion' to denote those most complex and relatively stable systems of our character that lack a distinctive name. That it also, like the term 'passion' denotes emotions,—though of a more delicate and lofty nature than those which the latter term suggests,—is a disadvantage that we cannot avoid whichever term we employ, because the distinction itself between these two orders of feeling has never been clearly grasped by the common mind. The particular defect of the term 'sentiment' is that it is a weak term, ill-fitted to express the strong loves that grow with our lives and end sometimes by absorbing them. Yet here too we are not without resources, and the term 'Master-sentiment,' though a neologism, is as strong and expressive as the term 'Master-passion,' yet free from that suggestion of violence which, except in certain characters, is as foreign to the ordinary behaviour of these systems as it is destructive of their stability.

> These violent delights have violent ends,
> And in their triumph, die ; like fire and powder,
> Which, as they kiss, consume: . . .
> Therefore love moderately ; long love doth so. . . .

Passing from this verbal question which the common accord of writers can alone finally settle, we come to the deeper problem underlying it: How are we to interpret the difference that we feel between emotion and passion or sentiment? "The more difficult it is," says our author, "to establish clear divisions in the fleeting world . . . of the feelings the more desirable is it to put at least in clear relief certain manifestations of them which seem to possess proper and specific characters of their own . . ." (p. 7). What then are the proper and specific characters of the passions? Starting from a difference of degree that seems to be familiar to us,—from the greater complexity and duration of the passions in comparison with the emotions, we have to ask: What "belongs to passion and to nothing else"? (p. 20). These characters seem to M. Ribot "reducible to three, which are, in the order of their importance, the fixed idea, duration, intensity" ("l'idée fixe, la durée, l'intensité," p. 20). We are accustomed to regard the fixed idea as pathological, but our normal ideas, M. Ribot remarks, may be also fixed, and the difference between them he thinks is vague. Scientific and artistic ideas sometimes impose themselves upon us and we become their prey, unable to guide or control them (p. 21).

We had thought that M. Ribot intended to disclose the characters that belong only to the passions, which distinguish them from the emotions, but the first and in his opinion the most important of these characters, the fixed idea, is, in his wide sense of the term, common to passion and emotion. Not only morbid emotions, but ordinary fear, sorrow and anger, while they last, are dominated by their own ideas. And if the ideas of passion last longer, and can therefore with greater propriety be described as fixed ideas, still the difference is one of degree and not the difference of kind that we had been led to expect. We turn next to the second and third characters, and we are offered in all their baldness characters common to all mental states, duration, intensi ("la durée, l'intensité," p. 20).

Failing to obtain the specific characters we had expected, we are brought back to the differences of degree from which we started as the only means of distinguishing between passion and emotion. The passion is just a more complex and stable feeling than the emotion. Its superior

complexity is chiefly shown in its intellectual development, and the different processes involved in that have been carefully analysed by M. Ribot. These are ordinary and 'systematic association,' 'constructive imagination,' 'affective memory,' 'logical operations,' 'constructive reasoning,' and last—the most important of all—judgments of the value of the object, and reasonings in justification of this value (pp. 27 to 42).

These processes, which seem to enable us to distinguish clearly between passion and emotion, all work under the guidance of the 'fixed idea'; and this fixed idea is not merely intellectual: it has its affective side (p. 27). Hence we find M. Ribot repeating in the present essay the conception of passion which he expressed in his earlier work on The Feelings. Passion is "a fixed emotion" (p. 27) or a "prolonged and intellectualised emotion" (p. 7). He offers this definition with certain reserves, and these seem to be that, in his opinion, there is at the root of every passion a tendency, which maintains the fixed idea with its feeling, and through it controls the complex intellectual development of the passion (p. 27). But these reserves do not qualify the statement that passion is a fixed emotion, because the emotions also have such tendencies. There are instincts at the roots of fear and anger that account for the characteristic behaviour of each, and may be held to determine the nature of their feelings and ideas. As M. Ribot rightly regards emotion not as an abstraction of feeling, but as a concrete fact constituted of "movements and inhibitions of movements" (p. 6; see also *La Psychologie des Sentiments*, première partie, ch. vii.), his reserve serves only to emphasise an aspect common to both emotion and passion.

We return therefore to the conception of passion as a fixed and intellectualised emotion. What emotion then is it? This important question M. Ribot does not ask.

If we take an example we may perhaps be able to answer this question. What is the fixed emotion of avarice? Is it the joy of the avaricious man in the possession of his wealth, present in the thought of it, expressed in his handling of it, and gloating over the sight of it? This, at least, seems to be the centre of his passion in favourable circumstances, to which his activities converge. But suppose that he loses his wealth or a part of it; or even that he fears to lose it. What becomes of his joy? It is replaced by sorrow or fear. But if his passion is identical with joy, then it ceases to exist when his joy ceases.

Now we know as a fact that a passion does not cease to exist because the joy felt in the possession of its object is

replaced by sorrow at its loss or fear at its apprehended loss. On the contrary the sorrow and the fear are both evidence of its continued existence. If the avaricious man did not feel them in the appropriate circumstances he would not love his wealth. What then is the love of his wealth? what is its fixed emotion? we cannot answer this question.

Now it is true that when an emotion or feeling is 'intellectualised' it tends to become more stable. The more intense our joys, the more unstable and the less intellectual they are apt to be, whereas there are calm and thoughtful joys that have a prolonged duration. Inconsolable sorrows are not violent, or if violent at the commencement, in becoming chronic they are so no longer. They live then in recollection of the dead or lost object, and if at times the vivid image of past scenes revives the first anguish, yet on the whole all prolonged emotions are calm and lacking in intensity. Yet this stability of feeling does not serve to transform them into passions. For if a man were uniformly prosperous, and were to maintain the possession of what he loved most undisturbed, and with rare constancy to preserve the joy or pleasure in its possession, still his passion would not be identical with this most stable joy or pleasure. It would never be true that were misfortunes to come, though they did not come, and his joy or pleasure to be transformed into its contrary, that his passion would cease to exist, or be transformed into its contrary, as love into hate; or that were he to welcome the change and feel the joy or pleasure in the relief from his riches which he felt before in their possession, that he would still love them. Thus a passion is neither identical with an unstable emotion nor with the most stable and intellectualised feeling into which we can conceive it subsiding after the loss of its first intensity.

In a curious section of his work, and as if forgetful of having called passion a fixed emotion, M. Ribot raises the question, "Can the emotions become passions?" (p. 134). Certain of them "with time may be transformed into a state analogous to passion," others cannot. But his thought remains indefinite, and he concludes with his favourite doctrine that "only tendencies engender it" (p. 134). Yet he offers one example of this vital transformation:—the emotion of joy may become the passion for pleasure. There are those who make pleasure the end of their lives. But he does not admit us into the secret of the psychological development. He points out only some of the obvious external conditions,—health, idleness, riches, and perhaps companions (p. 132). Nor does it occur to him that joy may

be the source of many different passions, and that it would be interesting to inquire why under its influence some pursue and others avoid pleasures.

He is more embarrassed to find any plausible reason why certain fixed emotions which he at length recognises, are not and cannot be transformed into passions. He considers three, anger, fear and grief. There are men so irascible that to be angry with some one or something becomes a need, constant as a passion. Here then is a fixed need,—and M. Ribot regards such ("besoins, instincts, tendances," p. 127) as the source of all or most of the passions,—a fixed, or at least a frequently recurring emotion, and an unlimited field of men and things on which to exercise it. Why then is it not a passion? Is it that the need is not always felt, and that the emotion is not constant but frequently recurrent? But what greater constancy have any of our passions? Are their needs always felt? Are they not broken by hunger and thirst and sleep and bodily exercises, even when they have absorbed the most of a man? Are their feelings or emotions any more unbroken? Will they not be liable to constant changes and interruptions, like the emotional life of man himself? All these questions we cannot but answer in the affirmative, and they make the distinction between these two orders of feelings the more embarrassing. What explanation has our author to give? That hate is the passion, and anger the emotion, and that experience convinces us that "the irascible are rarely haters" (p. 130)! And he criticises Bain, who it is true made the mistake of regarding hate as a species of the emotion, anger, because he said that it sufficed to have an irascible temper, and to suffer frequent provocations and offences, for hate to develop as a permanent affection, a blunder he thinks which such a psychologist would hardly have been capable of had he not "misunderstood the difference of nature between emotion and passion" (p. 130)!

The other emotions are as embarrassing; nor will it help us if we refuse to call them emotions because of their relative stability. There is fixed fear and "inconsolable grief". With regard to the latter, M. Ribot resolutely faces the facts. "Are there not here," he asks, "all the characters assigned to the passions: a fixed and importunate idea, duration, intensity?" ("idée fixe et obsédante, durée, intensité," p. 131). "Yet, common opinion will refuse to identify endless sorrow with passion." But his theory affords him no ground for distinguishing them. The best explanation he can find is that the fixed idea of passion is "a part of

oneself," whereas in prolonged sorrow it is "something foreign" ("un corps étranger") from which we cannot escape (p. 132). Now it is true that when we struggle with our grief, the fixed idea connected with it is dissociated from ourself. But the same result overtakes many of our passions. The drunkard, the gambler and the sensualist sometimes struggle with their vices and endeavour to escape from the fixed ideas connected with them. Nor is it true that in grief we always oppose ourselves to its idea. Far from it. No idea are we more apt to hold to as to something sacred. We reject all comfort. To forget seems to us unworthy of ourselves. There is the ideal of unswerving constancy. And how complex is the intellectual development, how unlike what it is in our ordinary emotions,—the living in the past and future,—as in all passions,—the recollection of past joys and happiness, "sorrow's crown of sorrow"; and in the future, the one hope of reunion in death.

We must then judge that M. Ribot's theory fails to interpret the facts admitted by himself, first the difference between the passions and ordinary emotions as something more than a quantitative difference; secondly the difference between the passions and fixed emotions of sorrow, fear, or anger,—where the quantitative differences of stability and complexity may be eliminated; and lastly by conceiving passion as an intellectualised and prolonged emotion, which he at least sometimes does, he is logically bound to conclude, that when this emotion changes, as it should do, in response to changes in the environment,—as joy into sorrow or fear, or desire into satisfaction,—that then the passion itself has come to an end. The source of the failure of the theory to explain such fundamental facts is to be traced, not merely to the vagueness and uncertainty of its principal conceptions, but chiefly, as it seems to me, to this, that M. Ribot has altogether misunderstood the relation in which emotions stand to passions or sentiments. Having conceived of emotion quantitatively and not qualitatively, as distinguished by intensity and brevity, he naturally formed a quantitative conception of passion, as distinguished by the stability and complexity of its feeling. He thus cut the one off from the other. The two states "are not only different but *contrary*" (p. 7). Even when a passion appears to be born suddenly, as sexual love, it "must pass through an embryonic period more or less short during which it will free itself from the characters of emotion in order to assume those which are proper to itself" (p. 140). It must then have been a surprise to him to find that, sometimes at least,

there are still emotions in passions. In one place, he admits that "every passion that has a long duration is crossed by some interruptions of emotion" (p. 7). In what way then does he regard this irruption of emotions into this opposite state of passion? He regards it as a relapse of passion into emotion, or as evidence that there is no true passion (p. 7). Thus children and savages, he thinks, are, on the whole, incapable of passion (p. 26). They live in a world of emotions. And in considering the love of Alfred de Musset for George Sand who both loved and hated one another, and alternated between sudden "gushes of tenderness" and "cries of rage," he remarks that this is not "passion, which is a chronic state, but its counterfeit made up of a succession of acute states or crises; it is a return to the state of emotional disposition" (p. 69). That there is a certain truth in this may be admitted. The more violent our emotions, the more they endanger the stability of passion. For passion is an organised system which involves the control of emotions; and when these break from its control, they are no longer parts of its system, but act on their own account. But suppose that they are not so intense, or that nature in giving a man a disposition to strong emotions gives him also a strong will to control them. What then? We do not know. But in M. Ribot's sense of the term, an emotion that has not reached a certain degree of intensity—a degree quite indefinite—is no longer an emotion. It falls into a third class, which is neither emotion nor passion, comprising all the feelings of our daily life that have only a "moderate intensity" (p. 73, see also p. 5).

Thus the principle underlying M. Ribot's classification is a division of the feelings based on quantitative differences of intensity, stability and complexity. The first class comprises the feelings of moderate intensity, the second those of considerable intensity and instability or the emotions, the third, those which are stable and complex or the passions. And this principle apart from its defect, that, where these differences are either not susceptible of or not subjected to exact measurement, it can only issue in vague statements of little or no scientific value, has here a more serious consequence. Through his application of it M. Ribot has isolated the emotions from the passions and failed to understand their intimate, reciprocal relation.

II.—The Nature and Genealogy of the Passions.

In one respect M. Ribot's theory of the passions is typical. It represents a new attempt to interpret on the lines which

have generally been followed since Kant the difference between the emotions and passions. Hence in criticising the inadequacy of his theory we criticise also the inadequacy of the older conception which remains, in spite of the fresh way in which M. Ribot deals with it, substantially the same. This older conception is expressed in the simile of Kant that emotion is like a flood that bursts its dam, and passion like a river that wears for itself a deeper bed. The one is a sudden force soon expended; the other grows stronger with the habits of thought and action which it slowly forms. The picturesqueness of the conception and the amount of truth which it contains explains its wide acceptance. There is such a difference as it represents between the feelings; only this difference does not coincide in all cases with that between the emotions and passions. For there are emotions, as we have seen, that have the stability of passions, and like them are strengthened by habit and reflexion, as morbid fears, inconsolable sorrows, and we may add, subtle emotions of respect or contempt that, once felt for an individual, are frequently borne to him for the remainder of his life. And as there are stable emotions, so there are unstable passions as, in so many instances, sexual love. If we then apply the theory consistently we must include in the class of the passions the fixed emotions, and in the class of the emotions the unstable passions. But if we do this we shall be uniting things that we ought most to separate, and separating others that we ought most to unite. And it will be due to the persuasiveness of this conception which has caught just those differences which are most readily observed.

If we pass from these two classes to the third class which M. Ribot has formed, comprising the feelings of "moderate intensity," which are the most frequent in our daily life, this addition to the older theory, possessing the same kind of obvious and indefinite truth, so far from lessening the difficulties in its path, aggravates them. For it is certain that there are passions which through the greater part of their life-history often do not exceed such a moderate intensity of feeling, as the passion for science; while there are other feelings, which the term passion is ill-adapted to express, but which yet have all the stability, complexity and intellectual development assigned to this class, as the calm and steadfast affection for our children and friends. But to make the evil greater: into this third class fall also all our emotions when they do not reach the indefinable standard of 'brevity' and 'intensity' which M. Ribot requires of them, although the lower degrees of anger and fear are still the same emotion as the higher,

possessing the same nature and tendencies in a weaker or less conspicuous form. And thus we take away from the class of the passions and from the class of the emotions what really belong to them, only to confuse their differences in this third class of feelings of moderate intensity.

Now in opposition to this principle of classification based on the quantitative differences of the feelings, which confuses their important differences to make way for those which are obvious and indefinable, we shall advance quite a different conception, not based on vague differences of intensity, complexity and stability, but which will interpret the greater stability and complexity of the passion or sentiment which as a rule exists. The difference between emotion and passion is not, as M. Ribot thinks (pp. 7, 130), an opposition of nature, or they would exclude one another, which they do not. Nor does the quantitative difference between them, which as a rule exists, mean that feelings of one degree of intensity, duration and complexity are emotions and feelings of another degree, passions: for in this case also, however artificially our classes were constituted, still they would exclude one another; feelings on one side of an arbitrary line would be emotions and feelings on the other side, passions. The emotions would have no legitimate place or function in the passions, and if they sometimes occurred there we should have to regard them, as M. Ribot regards them, as a relapse from passion into the acute form of emotion (pp. 69, 89). But the emotions have an essential place and function in the passions, and the true distinction between them is the distinction between the same feelings regarded alternately as individuals and as forming a higher organisation. This higher organisation is the passion: passion is organised emotion. In every passion there is a system of self-control regulating more or less efficiently the intensity and behaviour of its emotions; whereas when emotions act independently there is at most the restraint which one exerts on the others; there is no system of self-restraint within the emotion. Thus we speak of the impulsiveness of men given over to the dominance of their emotions; and although fear sometimes excludes anger, and sorrow, joy, this does not imply the self-control of which they stand in need. But a man dominated by ambition or avarice is no longer impulsive: the emotion is controlled by the system.

But the complex nature of passion is not sufficiently defined as organised emotion, it is also organised desire, and here the same system of self-control works to subordinate the lesser desires to the greater. For since many of our emotions have impulses, inseparable from their nature as

fear, anger, shame, disgust, pity, gratitude, etc., and since impulses that are checked are apt to rise into conscious desires that we feel, frequently recurrent desires become part of the life of passions; and in fact it is only when they are either latent, or given over to their few moments of triumph or enjoyment, or perhaps when crushed by sorrow that they do not feel them. Thus passion is an organised system of emotions and desires; but not only or mainly of emotions in the restricted sense of M. Ribot, but more often of delicate or calm emotions which are suggested in the current of our thought. The violent emotions, except in some temperaments, chiefly occur in crises in the history of the passion. For its self-control is exercised in restraining all intensity and violence lest they deflect it from its ends. Hence emotions in their secondary and acquired state as organised in passions have not as a rule the explosive violence of their primitive forms,—and where they have they are apt to break up the organisation of the passion and become again independent forces on their own account. But it would be a mistake to suppose that the diminution of their intensity involves weakness. The anger which explodes uses up its strength at once, and is followed by regret; but when its outward manifestations are checked and its vindictive thoughts multiply and consolidate in calm reflexion, anger is deepened and strengthened: and we have only to think of the steadfast hope that inspires every passion in its first and vigorous growth to see how efficient the calm but strong emotions may be in the service of the passions.

Thus if we take a comprehensive view of any passion from its commencement to its decline we find that it consists in an organised succession of emotions and desires; but we must not infer from this that at every stage of its process its feeling is defined as emotion.

The intellectual development of the passions and the various processes of thought they bring into play have been carefully studied by M. Ribot, and we may admit unreservedly that every passion has a much higher intellectual development than any emotion if we mean by 'emotion' *independent* emotion. In fact if we think of political ambition, the love of truth or art or religion, we shall hardly find it an exaggeration to say that only in the passions are the intellectual powers of a man developed to their fullest extent. Now it is precisely when our thoughts are most defined and closely organised together that the feeling of them is apt to be most undefined and faint. Solitary thoughts rise in our minds and draw with them so often hopes, despondencies or

regrets, or feelings of anxiety or anger; but these concatenated thoughts will not condense into any emotion that we can name or recognise. We can sometimes say on reflexion that their tone is faintly pleasant or disagreeable; but not that the state as a whole is either joy or sorrow, hope or despondency. Since then passion requires so much thought and reflexion to organise its emotions and desires, and to accomplish and harmonise its ends, there will be recurrent phases of its history in which it is without emotion. But passionless as it then appears, it is still moved by one or other of its great, controlling desires, it is still from beginning to end an organised succession of desires and emotions.

Finally this theory of the passions interprets their greater stability in comparison with the independent emotions, which as a rule exists. For since a passion has the duration of all of its emotions and desires it must have a greater duration than that of any one of them; and it has, moreover, the stability which self-control and organisation always manifest in comparison with unregulated impulse.

Let us now see what value this theory has in interpreting the passions which M. Ribot has collected. His list includes gluttony, drunkenness, sexual love, love of sports and adventure, the passion of gambling, avarice, ambition, hate, jealousy, the passions for art, science, politics and religion, patriotism, the moral passion, the collector's passion for engravings, pictures, books, stamps, etc., the love of pleasure. The first two are ambiguous. They are inordinate appetites or passions according to the meaning we attach to the words. When we call a dog gluttonous we mean that his appetite is excessive. But an appetite is not a passion. It may, like emotion, be organised in the service of passion, or be left in its independence, liable to excess and deficiency. In the second sense, gluttony is the love of the pleasures of the table, something different from appetite though developed from it; and it is this that M. Ribot understands by the term (p. 48). It is the same with drunkenness and sensuality: and from three natural appetites three passions may be developed, which seem to be varieties of the love of pleasure. But the proper meaning of the terms in English, at least of the two former, is inordinate appetite and not the passion developed from it. Here too we see that just as emotions sometimes have the stability of passions, so our natural appetites have an even greater stability, and that by this characteristic alone we cannot distinguish the passions.

Now if we compare the remaining passions on this list a remarkable fact is disclosed. All of them with the exception

of two, hate and jealousy, are like the three first that we have already considered, varieties of love, and we do not require to strain the meaning of the term to bring out their common affinity. They are the love of sports, the love of adventure, the love of gambling, avarice or the love of wealth, ambition or the love of superiority or power, the love of art, the love of science, the love of a religion, the love of a political party, patriotism or the love of country, the love of collecting and the love of pleasure. Religious passion may seem to be an exception, since fear of its object or of God is more common than the love of him; and what we call the passion may be only a stable fear, like the fear of death. But a stable fear, like an inconsolable sorrow or an indestructible appetite, is not passion in the same sense, but only in the loose and popular meaning of the word. It is always the same emotion; but a passion is sometimes one emotion, sometimes another, according to circumstances. But if the fear issues in certain other emotions, as it often does,—for deliverance from evil fills the mind with joy, and even gratitude to the deliverer,—and there arises from the fear a system of emotions where before was only a single emotion, then the fear which survives is not the passion but one only of its emotions. Religion based on fear has grown into love,—love of its rites and practices or of the being who is the object of it.

We conclude that all the passions on this list with the exception of two are varieties of love; and one of these two is hate. Thus among this variety of loves we meet with the solitary figure of their opposite, hate. For we grow into love naturally; but we are driven into hate by a kind of inversion of our natural life. From the child to the old man love multiplies and branches into new directions, reorganising the same old emotions in new objects; but hate is an ugly episode from which we are in a hurry to escape unless our nature be peculiarly evil. Hence hate is so often a barren passion, which by destruction of its object destroys itself, and branches into no new systems. It is a curious fact that of the varieties of hate most are dependencies and complements of love. Thus patriotism is often accompanied by the hatred of foreigners, and religion by the hatred of heretics, and the love of knowledge by the hatred of ignorance and falsehood, and the love of beauty by the hatred of ugliness. Yet there are a few independent forms of hate of which the most important, in addition to the hatred of individual persons and places, are class-hatred, sex-hatred and misanthropy.

We come next to the other exception, Jealousy. Now it appears to me that M. Ribot has here confused a violent and

prolonged emotion with a passion, and it is a mistake which is likely to arise from the use of the term 'passion' to designate these higher systems. For jealousy is not even a primary and independent emotion, like fear or anger. It is one of those derivative and dependent emotions which seem only to be developed within the system of love.[1] Thus we find it in sexual love, and in the love of anything that we desire to possess exclusively, as power or fame. The proud and vain are prone to it. Louis XIV., according to Saint Simon,[2] was one of the most jealous of men, and his jealousy was rooted in pride and vanity. He was jealous of statesmen, generals and of any one who threatened to eclipse him in one of the qualities on which he prided himself. For jealousy has a proper place and function in sexual love and pride, being obviously directed to preserve exclusive possession of their objects. It is true that it is, as M. Ribot remarks, composed of opposite elements (p. 65); and the opposition does not merely arise from the conflict between it and other parts of the system of love,—as between the disinterested and tender emotions of sexual love and the desire of exclusive possession; there is a conflict in jealousy itself. There seems to be fused in it the opposite emotions of fear and anger. The jealous man anxiously and persistently strives to separate the woman he loves from the presence of his rival, as the miser tries to hide his gold where it cannot be stolen; and here jealousy acts like fear. But the tragedies of jealousy arise from its other, aggressive element. Anger is felt against the rival and against the woman herself so far as she supports him. Thus a man's behaviour under the influence of this torturing emotion represents one or other of its elements, being timid or violent according to circumstances. If this be true, jealousy and love are not, as M. Ribot appears to hold, two opposite passions combined together (p. 65), but the one is an emotion developed within the system of the passion, through, as far as we can see, a conflict between two of its primary emotions. The relation of a violent and often prolonged emotion, like jealousy, to the passion of love is no more obscure than the relation of love to its other emotions. Like them, unless it be restrained by the system as a whole, it will be more injurious than useful. Inconsolable sorrow which M. Ribot found so hard to exclude from the class of the passions has not any more an independent origin: who ever heard of it where profound love did not precede it and survive with it?

Through the exclusion of jealousy from the list of the

[1] See "Character and the Emotions," MIND, N.S., vol. v., pp. 219-220.
[2] *Mémoires*, xiii., 1.

passions, all of them are now shown to be varieties of love or hate. Does not this remarkable fact suggest that the difference between the passions and the emotions is the difference between love and hate and the emotions? And if we include in the list of the former, friendship, love of the home and the reciprocal affection of the members of it to one another, so far as that occurs, which because of their "moderate intensity" M. Ribot would regard as neither emotions nor passions, the result is still the same: these varieties of love, though not so apt to absorb the whole man as ambition or avarice, have essentially the same organisation. If then there be other passions than love and hate, they must be comparatively obscure or infrequent.

Now we must admit that this distinction between love and hate, on the one hand, and fear, anger, joy, sorrow, jealousy, shame, and all individual emotions, on the other, is not involved in the ordinary meaning of the terms; and from Descartes' *Traité des Passions* to the present time, love and hate have been placed in the same class with these emotions. The dictionary definitions of love take no account of it as a system of desires and emotions, but, when they do not give an alternative expression, as 'regard' or 'affection,' define it by its most conspicuous emotion, as joy or delight, or 'taking pleasure in' something, or tender emotion.[1] And were we to ask, what is the relation of love to the sorrow that arises through the destruction or even prolonged absence of its object, the answer would probably be, that this sorrow is a mere effect or consequence of love. Yet if love is joy or pleasure it ceases to exist when pain has excluded pleasure, and sorrow, joy; which no one would maintain. But the dictionaries cannot give an adequate definition of love, because the conception of it as a complex system of emotions has not been grasped by the common mind.

We come next to the genealogical problem on which M. Ribot lays so much stress. Its importance we cannot deny; but it is much more difficult, in psychology, to show how some constituent of our mind and character has been developed than to analyse it after it has been developed in our mature experience. Where are we to find the facts on which the theory of this development must be based? If there were extant a systematic collection of documents bearing on the development of the passions in the child and the man, then we should have a comparatively safe basis on which to construct such a theory of the passions. When novelists and

[1] See Johnson's *Dictionary*, Art. "Love".

observers of character lend themselves to this great work of psychical research, and instead of seeking mainly to please us, form systematic studies of the growth and behaviour of the different passions, then the science of character—with an influence on human life and destiny which who can now forecast—will advance rapidly in truth, coherence and completeness. In the absence of this essential accumulation of facts we can only form hypotheses which we know not how much we may have to modify in the future. The available evidence at present must be drawn from (1) such recollection of the growth of certain passions in ourselves as we may seem to possess,—and how many of these are sufficiently definite or trustworthy?—(2) the knowledge that joy or pleasure is the conspicuous emotion in love as evidenced by dictionary definitions and the descriptions of psychologists; (3) such accounts as we may be able to collect from novels and biographies.

Premising this much, and that no genealogical theory of the passions can be, at present, more than tentative, we may proceed to give some account of what seem to be the original source and subsequent development of love. If we assume that joy, either suddenly formed, as in sexual love, or, as in friendship, often of insensible growth and accretion, is the first emotion of love (which is only a supposition, for pity or fear may in some cases precede joy), then we have at least a standing ground from which we can calculate the occurrence of other emotions. It seems to be an assured and familiar law of our minds that whenever joy has been felt in the presence of an object with sufficient strength that either immediately, or after a certain interval, during which the object is not experienced, pain or sadness will be felt in connexion with an impulse; and wherever the necessary ideas are forthcoming this impulse will be defined as desire for renewed experience of the object. Hence some definitions of love centre in this desire. Thus Descartes defines love as an emotion of the soul "which incites it voluntarily to unite itself to an object that appears suitable".[1] Now whether the vague feeling of pain in the absence of the object is further defined as sadness or sorrow seems principally to depend on (1) the length of the absence, and (2) on whether the desire for the presence is felt to be now or for an indefinite future time, unattainable. Further we cannot be certain in this law of the succession of pain, sorrow and impulse to joy whether the pain must be felt before, after, or simultaneously with the impulse.

[1] *Les Passions de l'Ame*, Deuxième Partie, Art. 78.

Now given the uprising of desire we seem to be able to enunciate another emotional law governing the development of love. In proportion as the desire persists and is not realisable at once, and is subjected to a variety of circumstances, some favourable, others unfavourable to its realisation, the prospective emotions are aroused in the circumstances appropriate to each. These are specially hope, despondency, anxiety, confidence and despair, but also all the primary emotions when aroused by the thought of a future event, as anger when we anticipate opposition and fear when we anticipate danger. Whether they are aroused in any given case of desire, and how many of them, and in what strength, depends on the strength of desire, and the circumstances acting on it, which vary from one case to another. But we may perhaps infer that, in a normal subject, all of them would be elicited were the circumstances sufficiently varied, and the desire sufficiently strong. Finally the last stage of desire is reached, and with the accomplishment of its end, renewed joy or satisfaction is felt, and its process terminates.

Now it is generally at some such stage of the development as in this return to joy after the pains of absence that is constituted that valuation of the object in and for itself which is an essential feature of all love, and recognised as a constituent of the passions by M. Ribot. This valuation may be latent in the first joy, which at least is an essential condition of it, but it seems to be chiefly in the recurrence of joy after sorrow and desire that it rises as a conscious emotional belief into consciousness. And this is implied in the common observation that we never really value anything until we have lost it. Now it sometimes happens that after the first succession of joy, pain, desire and attainment that reunion with the object does not arouse joy but disappointment. We hear people say 'He was delightful at first but afterwards he disappointed me,' or 'What was it that I saw in him that so greatly pleased me?' But when disappointment is felt instead of a recurrence of joy, then the intrinsic valuation of the object which is essential to love is either not constituted or is destroyed. And the process comes to an end. For separation will no longer be followed by sadness and desire; and the object no longer occupying our thought will be forgotten. But where love is constituted there is a recurrence of joy with renewed experience of the object, followed again by pain and desire. And thus in the main, the course of a passion is a recurrent succession of joy, sorrow and desire. For not only does separation from the object occasion desire, but so does also its injury or destruction, its unsatisfied wants,

where it is a human being, or its immaturity, where it is knowledge or wealth or a little child.

With the accumulation of experiences of the object in correspondence with the succession of joy, sorrow and desire, and the prospective emotions, and the emotional belief in the value of the object, memories are formed which in their turn become the source of retrospective emotions. And thus love has its regrets as well as its satisfactions, its delights in past scenes and its disappointments, and so often cannot escape from remorse, self-reproach and shame.

Now although joy may not be the first of this long succession of emotions and desires, it is nevertheless the fundamental emotion of the system. For if, earlier or later, joy were not felt in the presence of the object there would be no feeling of pain in its absence, no sorrow in its injury or destruction, no desire for its presence, possession, or improvement, no hopes or anxieties on its behalf, no disappointments in our expectations of it, no despondencies at failures to reach it, to help it or be reconciled to it, and no regrets for its injury or neglect; and therefore no love. And this essential importance of joy to the development of love we all recognise in certain cases. Thus not only would sexual love be inconceivable without the intense joy in the mere presence of its object, so different from the restless appetite of sex, but even friendship could not be formed without a mutual pleasure in company, nor the mother's love without the tender delight in the sight of her offspring. We only miss the persons or the things or the modes of life that have been a delight or pleasure to us, and we only love those that we miss and which we have joy again in recovering. The mother who does not feel the tender joy in the sight and touch of her child, in tending it and playing with it, does not love it. She may fulfil in part her duties, but coldly without love. And hence it is that so many definitions of love go so far as to identify it with joy or pleasure in the presence of its object. Thus Spinoza defines it as "pleasure accompanied by the idea of an external cause,"[1] and the ordinary dictionary definitions identify it with taking pleasure or feeling delight in the presence of a person or thing. And from Aristotle's time to the present day, where this confusion is either avoided or for the moment forgotten, the position of delight or joy as a cause of love has been constantly recognised. Thus Aristotle says, "It is indeed ever the beginning of affection to find pleasure not only in a person's presence but in the recollection of him too

[1] *The Ethics*, Part iii., Prop. xii., note.

when he is away";[1] and Prof. Westermarck in developing Herbert Spencer's theory of the origin of maternal love as being essentially the love of the weak and helpless, observes, that the mother "is in close proximity to her helpless young from their tenderest age; and she loves them because they are to her a cause of pleasure".[2] And again of sexual love he remarks: "The tendency to feel some attachment to a being who has been the cause of pleasure—in this case sexual pleasure—is undoubtedly at the bottom of the instinct".[3]

Now it seems strange that out of all this variety of emotions in the sentiment or passion of love, one emotion alone should possess this function of being an essential basis and condition of all the rest. This fact, if it be a fact, we cannot pass by; we have to explain it: we must inquire by what means joy alone becomes a cause of this organised succession of emotions and desires which love is. Now whatever truth there may be in the contention that the passions are secondary and acquired products of character compared to the emotions ("Toutes les passions étant de formation secondaire, sont nécessairement acquises, . . ." p. 9) still we should not acquire them were there not in the constitution of the mind a secret and instinctive disposition to organise its emotions; and it is this very complex instinct that accounts for those empirical laws of their succession which we have been considering. That is to say the law connecting the cessation of joy with the feeling of an impulse,—whether arising at once or after a certain interval,—and the laws connecting this impulse developed into desire with the occurrence of the prospective emotions in their appropriate circumstances, and the law connecting the cessation of these emotions and desire itself in the attainment of its end with the recurrence of joy as satisfaction, and that connecting this process as a whole with the repetition of it in the changing circumstances of absence, of injury to the object, of its defective or immature state and of its unsatisfied wants,—that all these laws point to the existence of a bond between the emotions which is innate in us and part of the very constitution of the mind. It is this bond that I think we may call an instinct, and there are two things to notice about it, that it is a very complex instinct, connecting together the dispositions to a great many emotions and desires; and secondly,

[1] *The Rhetoric*, Weldon's trans., p. 79.

[2] *The Origin and Development of the Moral Ideas*, vol. ii., ch. xxxiv., p. 189.

[3] *Ibid.*, p. 191.

that this instinct is developed into love by a sufficiently strong feeling of joy, not necessarily an intense emotion.

To understand this better we must consider that each one of the primary emotions is connected with its own emotional disposition in the nervous system or in sub-consciousness, and that these emotional dispositions are themselves instincts, causing us to behave under the influence of fear, anger, disgust, surprise, joy and sadness much as the animals behave under them. But the instinct of which we are speaking is not any one of these instincts at the roots of the primary emotions. Nor yet is it all of these dispositions or instincts regarded collectively. For the primary emotions often act with relative independence of one another. We enjoy moderately a performance at a theatre without experiencing any subsequent sadness through its cessation or desire to witness it again; we experience even sadness independently of joy when it is connected with a depressed state of the bodily functions, and joy independently of sadness when their activity is healthy and vigorous; we experience anger independently of fear, and fear of anger, in their primitive forms, as well as both organically connected in a passion; we experience an independent disgust, as well as that self-disgust when we have missed opportunities of realising the desires of our passions. Thus the instinct on which the development of love is based is not any one of these instincts at the root of the primary emotions, nor all of them as a collection, but is their total existence as an organised system. And the evidence that this is an instinct is that undoubtedly there is a system of emotional dispositions involved in the love of an object, and that however much this system may be developed in our experience and in coming to love the object, still the structure of it seems to be innate and instinctive. For we do not learn by experience to put desire and sorrow after joy in separation from the loved object and in failure to unite ourselves to it afresh; nor again, do we learn by experience to connect with this desire in the changes of circumstances to which it is subject the different prospective emotions; but these manifold connexions are part of the very constitution of the mind. And if we reflect on an instinct which is admitted to be such by both biologists and psychologists,—the maternal instinct of animals,—we shall be brought to the same conclusion. For the behaviour of this instinct is most complex. The mother animal will fight in defence of her young, will conceal them or flee with them when they are in danger, will procure food for them, will play with them, will search for them when they are lost, and

manifest pleasure in their recovery. And it is clear that this is not the conduct characteristic of one of the emotions, but of many combined. Fighting in defence of her young is the manifestation of disinterested anger, fleeing with them or concealing them, of disinterested fear, keeping them in her neighbourhood and playing with them, of joy, wandering disconsolate in search for them, of sorrow and frustrated impulse, and the expressions of pleasure in their recovery, of renewed joy. Thus the maternal instinct is in some way a system of many emotional dispositions, and the particular instincts connected with them, and gives rise to that emotion and conduct appropriate to the circumstances: and however much it may acquire from experience this fundamental structure of it is innate. And if we reflect on those forms of love which seem the most removed from instincts, as avarice or ambition, we shall yet find in them the same structure of emotional dispositions, unlearnt from experience however much else be learnt.

And now to interpret the special relation of joy to this instinct. The instinct of love, though the most complex of human instincts, is not itself love in any proper and complete sense of the term until it has found a suitable object. It must be aroused by and referred to this object before there can be said to exist a love of this object. Now joy is the signal that it has found an object; for the meeting with this object is joy. Often, as in sexual love, it is a most surprising joy, wonder and admiration.

> And though I stood abasit tho a lite,
> No wonder was; for why? my wittis all
> Were so o'ercome with pleasure and delight,
> Only through letting of my eyen fall,
> That suddenly my heart became her thrall,
> For ever of free will—for of menace
> There was no token in her sweete face. . . .
> Then I study in myself and sayn;
> Oh sweet! are ye a worldly creature,
> Or heavenly thing in likeness of nature?

But joy is not merely the signal of the union between the instinct of love and its perceived object. It is no mere otiose accompaniment: it has an important function. For it is essential to the development of love that the instinct be related to some object of perception or thought, and secondly that it be bound to this object so that not merely one of the emotions of its system, but all of them, and not merely at one time, but at various successive times, may find in this object an identical point of reference. Now joy can fulfil both of these functions. We cannot love any kind of

object, but we can love any object in the presence of which we feel an enjoyment or delight sufficiently strong. Where we feel no enjoyment the attention is not arrested by the object, unless some other principle detain it. But fear and anger though they detain the attention do not of themselves give rise to love, though often to hate. 'Interest' both directs and detains the attention, but by 'interest' we do not generally mean enjoyment in a thing for itself, but, at most, for something else connected with it. We are interested in any thing or person that arouses our curiosity. The desire of knowledge detains the attention, not for the sake of the object, but itself. Thus we are interested in the young because we desire to know what their future will be; we are interested in a book because we desire to know the conclusions to which it will be brought, or how the plot will develop and what will be the fortunes of the persons represented in it. But such interest does not lead to love unless there arise an enjoyment in the thing for itself. For as soon as our curiosity is satisfied we are done with that thing and pass on to some other.

Now joy does detain attention on the thing for itself, and alone seems to furnish the kind of object which can become an object of love. But, in the first place, this joy must have a degree of strength that we cannot with our present knowledge define. Innumerable things please us, but only a few of them do we come to love. In the second place, this joy must not be merely that diffused joy of health and good spirits, but must be specially aroused by some object of perception or thought.

Joy then seems to be the fundamental, the indispensable emotion in the development of love, that without which the instinct will not develop into love, that which selects an object to be loved, that which must be present at the orientation of the system however many other emotions be absent. Hence it is that we see so many people living together languidly without love, from duty and habit, or bound to some joyless occupation. They do not love the occupation, nor each other, because neither the one nor the other have ever been a joy to them. See on the other hand, how where there has been this joy and the love developed from it, in what a different way this joy has bound them together. For having developed the love, the joy may now be absent for long intervals without destroying the love. But the memory of it remains. And how often but for this memory, when the inevitable disappointments arrive, and exhausting labour has to be undertaken, and misfortune to be borne, on behalf

of the object, should we not cry out, 'What is the good of it?' But this memory holds us constant, and enables us to persevere with courage to the end.

This genealogical theory of love, or any other that we may adopt as an alternative to it, for the reasons that we have already given, can only be advanced tentatively. But at least it seems probable that joy has a quite peculiar relation to love, as evidenced by the common confusion between them, and the number of observations which point to it as the chief agent in the development of the passion.

On the assumption of the truth of this theory we have to add to and modify the definition of the passions which was derived from a statical analysis of them in consciousness. We defined love as an organised succession of desires and emotions, involving self-control, including an emotional belief in the intrinsic value of its object, and possessing recurrent passages in its history, more or less long and frequent, in which the concatenation of its thoughts does not allow of the formation of definite emotions. And some such definition as this we must give when we confine ourselves to the history of love as it appears in consciousness. But love is more than its history; and it sometimes springs into sudden and tumultuous life when its history has hardly begun. It is always a great possibility, and has more possibilities than those which come to fruition. For if it is now inconsolable grief or frustrated desire or a final hope of reunion or remorse for wrongs done to a loved object, the same disposition which caused these emotions in certain situations would in others have caused different emotions. Thus love is a hidden cause as well as a manifest effect. Hence it is that so often in the first fresh and strong love of an object we feel a mysterious power beyond the present emotion approaching to govern our future, and we think sometimes with terror of what we are committed to, and sometimes with terror that this new object of joy may be snatched from us.

> She was shy from the great bliss in her bosom,
> And was made timid by the fervour of her affection.

We can now give a second and causal definition of love supplementing our former definition. Love is the system which, under the action of joy, organises the dispositions of the primary emotions and desire, and of the prospective and retrospective emotions, on behalf of one and the same object, and which according to circumstances is manifested either as emotion or desire.

These two definitions we may use as tests to decide in a

given case whether what is felt for an object is or is not love. The first leads us to inquire into the history of the feeling in consciousness. If a mother's feeling for her child has been exhibited as a succession of emotions and desires organised on behalf of it, in which two chief desires control the rest, desire to maintain union with her child and desire for its preservation and development, then assuredly this is love. But in other cases where love is suddenly formed, as in sexual love, and sometimes in the passion for science or art, when a young man in the first wonderful moments of a new joy knows what his future career will be, there may not yet be any organised succession of emotions as proof of the existence of love. Yet often there is a vivid consciousness that the power of this first emotion is the power of love; and if we may take the sudden belief as any evidence of its truth, that joy has already aroused the latent instinct of love in relation to its object, so that were the circumstances at once changed and sufficiently varied he would feel any one of the emotions of love appropriate to them, then love already exists although one only of its emotions have been felt. And as if to justify the belief there is sometimes an imaginative forecast of the future in conformity with it, in which the images of events and conduct bring with them an echo of coming emotions. Thus while love must have some emotional effect, an organised succession of desires and emotions is only its fuller manifestation, it remains, in addition to them, a deep-seated cause and instinct ready to arouse any one of the fundamental emotions in the appropriate circumstances.

The peculiar position of joy in relation to the different passions of Love does not seem to have been suspected by M. Ribot. In his *Psychologie des Sentiments*[1] he excluded both joy and sorrow from the class of the primary emotions, assigning the curious reason that otherwise he would have to include in the same class bodily pleasure and pain. He discerned no essential difference between joy and sorrow and a pleasant or painful bodily sensation. Yet in the present work he admits them in a "very restricted sense" (p. 131, note). And after remarking that he has sought for the origin of the passions in "needs, instincts, tendencies" ("besoins, instincts, tendances," p. 127), he asks, "Is there another source? Can the emotions become passions . . .?" (p. 127). One after another, as we have seen, he rejects them. But when he comes to joy he anticipates a different conclusion. He thinks that it may become changed into one passion, the love of pleasure (p. 13).

[1] Introduction, ii., 5, and part 1, ch. ii., 11.

Now joy can no more be changed into a passion than an organ of the body can become the bodily organisation as a whole: but it is the determining emotion of not one passion but all passions of love. Its relation to the love of pleasure is peculiar. Here the element of pleasure is abstracted not only from the joy, but from pleasant bodily sensation, and pursued and valued for itself. It becomes the object of a passion, not the passion itself.

Now if Joy has the unique function we have assigned to it of selecting the objects of so many and such different passions of Love, we can hardly suppose that it is always the same in all of them without variations. For the differences of the passions seem to be reflected in the nature of their joys, or the differences of their joys in the nature of the passions. And as there is perhaps no other emotion so rich in varieties as joy, so this may account for the fact that there is no other passion so rich in varieties as love. There is a joy in intellectual, as well as in muscular activity, hence there is a love of knowledge as well as a love of sports and exercises; there is a peculiar joy in the possession of power over other men, and hence ambition; there is a different joy in admiring or reverencing great men, hence the love that surrenders power; there is a peculiar joy in being admired, and hence vanity; there is another joy in beauty, hence the æsthetic passion; and there is a quiet joy which precedes or follows the doing of good deeds, and hence benevolence. Thus the varieties of love seem to depend on our susceptibility to different varieties of joy. And if we ask why in one man one passion is developed and in another man a different passion, we must answer that either there is a greater innate susceptibility to the joy on which the one is based than to that of others, or else that circumstances have favoured the development of the one passion and been unfavourable to the rest.

And now to return to M. Ribot's theory. Instinct is, as we have seen, at the source of every passion; but instinct is not one source and emotion another distinct from it; the activity of the instinct is manifested in consciousness as emotion or impulse.[1] Thus the passion is not only based on the highly complex instinct of love, but also on the instincts which are involved in the dispositions of the primary emotions; and the activity of these instincts is manifested not only in the behaviour characteristic of them, but in corresponding emotions.

Over and above this basis of instinct common to all men,

[1] It is seldom that the relation of instinct to emotion is clearly interpreted. See W. McDougall's excellent account, *Physiological Psychology*, ch. vi., p. 109.

on which the development of their passions depends, there is sometimes also, where a master-passion is developed, an innate disposition peculiar to some. The joy which lies at the source of such a passion, it would seem, must have an extraordinary degree of strength, not the momentary strength of intense emotion, but that persistency or capacity for recurrence which is generally conjoined with a lower degree of feeling. But what is the source of this strength? It is evident that the minds and bodies of men are often adapted to different kinds of work, and that the work for which a man is adapted carries a susceptibility to a corresponding kind of joy and a capacity for the permanent recurrence of this joy distinguishing it from those ephemeral joys so soon destroyed by familiarity or satiety. In one man the surplus energy of his system finds its natural outlet in an activity which is predominantly muscular, and, if he have leisure, he develops the love of some sport or game, in another man in the systematic activity of the higher nervous processes, and he develops the love of some science or art, or he is finely balanced and capable of both. But, in other cases, passions may be developed which do not seem to spring from an innate disposition to a particular kind of joy. Every man enjoys the possession of money, but the disposition to this enjoyment is generally supposed to be acquired and not innate. The passion of avarice often rises on the ruins of other passions that have preceded it in youth, and grows from an acquired enjoyment. And how often is the religious passion seen to be a last resource of the soul to acquire some joy that shall endure, some outlet for its instinct of love, after the disappointments of affection, disgust with sensuality, or the collapse of ambition.

> I have ventur'd
> This many summers in a sea of glory;
> But far beyond my depth: my high-blown pride
> At length broke under me; . . .
> Vain pomp and glory of this world, I hate ye;
> I feel my heart new opened. . . .

Thus the joy which is at the source of a passion may be either one for which we have an innate disposition or one the disposition for which is acquired, and developed into strength by the circumstances of our lives. But in either case it acts only in conjunction with instinct as the other and hidden source of the passion. And where an instinct or innate disposition ripens within and does not meet with its appropriate object without, it commonly happens that a painful impulse is aroused. It may be long before a man discovers the kind of mental activity for which he is fitted;

and the impulse remains vague and objectless because he does not know what will satisfy it. And thus while an unsatisfied impulse often precedes the first emotion of joy, until its object be discovered and joy for it be felt, the instinct cannot develop into passion, having no common centre to which its several emotions can be referred.

Love, then, being based on a most complex disposition and instinct, relating all the fundamental emotional dispositions in a single system, developed through the selective action of joy, it is obvious that this instinct precedes the growth of the passion in the individual and probably in the race. And if evolution teaches us that the bodily functions, instincts and mental processes of animals are organised for their individual preservation and the preservation of their species, what is this but the precursor of love on a lower plane of existence? For this organisation includes that of their primary emotional dispositions, and these dispositions are therefore already related in a system. Thus long before there is self-love or the altruistic love of the race there is something that takes its place, which acts as an instinct without consciousness of its object and end. Yet although the emotions and appetites of animals are not independent principles of action but regulated in their discharge and related one with another, so that the animal acts as if it loved itself, and pursues its own preservation and welfare, yet we should regard it as a misuse of the term to call this systematic activity self-love; because we think the animal incapable of forming a conception of itself or of understanding in what its welfare consists. Yet here already is all that is most important for love,—the system, and its possible improvement through experience. What does it lack? The higher intellectual processes that are involved in a clear conception of the object and end, the rational choice of the means after comparison and reflexion,—all that improvement of an innate system due to the activity of a conception: and with this the joy based on conception and the consciousness that the animal loves both itself and others. Yet were love used in a broader sense to denote the instinct at its base, there would still be preserved that fundamental distinction, to which the whole of this article has been directed, between any one of our emotional or appetitive dispositions and that system in which they are organised with or without consciousness of their object and end.

II.—THE IDEA OF DEVELOPMENT AND ITS APPLICATION TO HISTORY.

By George Galloway.

This paper does not pretend to answer the large questions which belong to the province of the Philosophy of History. It is meant to be a discussion of the applicability of the notion of development in the sphere of historic phenomena, which may prepare the way for a detailed examination of the principle in the domain of religion. Our purpose will be realised if we succeed in setting the idea in a clearer light, in showing with what qualifications we must employ it in the region of human culture, and in suggesting the postulates which this use involves.

The word development is popularly used with a slender appreciation of its connotation. And even in scientific circles the term is applied without reflexion: it has in fact become one of the *idola fori*, a stock-phrase of the scientific market-place which it is not thought needful to justify. Speaking of words like 'latent,' 'potential,' and 'tendency,' Mr. Bradley cuttingly remarks, "It would be hard to overestimate the service rendered by these terms to some writers on philosophy".[1] And the same is precisely true of development. But the facility with which the word is predicated of objects so diverse as a plant, a man, a nation, and a type of culture, should suffice to give the critically minded pause. It is only natural to ask whether the idea has the same significant content in each of these examples. These are matters about which we must be clear, ere we can decide on the validity of the conception of development when applied to historical phenomena.

At the outset it may be of advantage to consider the origin of the idea and its introduction into modern thought. Like most of our philosophical ideas we inherit it from Greece, and it was first definitely formulated by Aristotle. The χωρισμός of Plato's ideas seemed to make process and becoming unintelligible, and Aristotle sought to solve the pro-

[1] *Appearance and Reality*, first ed., p. 384.

blem by his theory of a vital relation of form and matter which is realised in the constant transition from the possible to the actual. An object which is a concrete whole can be analysed into a form and a matter, and the fact that it passes through definite phases or stages must find its explanation in the form or *τὸ τί ἦν εἶναι*. Change and movement are the outcome of the innate striving of matter after form, but it is the form which *ποιεῖ καὶ γεννᾷ ἐκ τοῦδε τοιόνδε*.[1] Here Aristotle sets over against a mechanical (*ἐξ ἀνάγκης*) a final and immanent causality (*οὗ ἕνεκα*) which explains the process of unfolding in things. The form is at once the *τέλος* as it is also the universal by means of which we know the object.[2] Aristotle thus read the meaning of becoming as a transition from potential to actual existence,—a transition which is based on the presence even in natural organisms of an intelligible form or constitutive idea. With the difficulties and inconsistencies in which the carrying out of this thought involved Aristotle we are not at present concerned. But it is hard to overestimate the influence of this great conception on all later thought. The point we have to note is that Aristotle never seems to have considered history in the light of this theory of development. Indeed the classical world, when it thought of history, thought of a cycle and not of a progressive movement towards some far-off goal: and Aristotle himself threw out the hypothesis that the fruits of culture might more than once have been lost and found again.

The spread of the idea that human history is a process towards a divinely appointed end was directly due to Christianity. Eschatological notions flourished greatly in the primitive Church; and if some of these notions were crude, the whole movement had the effect of bringing the wide field of human life under the scope of a comprehensive teleology. Men were made familiar with the thought that the world and its inhabitants were moving forward to some end appointed by God. The view of history as the unfolding of a divinely ordained plan gradually fulfilling itself received an impressive expression at the hands of Augustine. In all this, however, we have history broadly treated on the basis of certain religious postulates rather than a deliberate and reflecting endeavour to interpret it through the principle of development. We must come well down into modern times ere we find the steps taken which led towards such an attempt.

The first significant treatment of the idea of development

[1] *Meta.* vii., 8, 1033 b, 12.
[2] *κατὰ τὸ εἶδος ἅπαντα γιγνώσκομεν*, *Meta.* iv., 5, 1010 a, 25.

in modern philosophy is that of Leibniz. From Aristotle he derived the conception of a continuous inner process teleologically not mechanically determined. The complete idea of the organism implicitly existed in the germ and directed its unfolding. Leibniz applied the same idea to the striving of the monad through the different stages of mental life towards completed self-knowledge. Then the system of monads has its Sufficient Reason in God, who must thus be the ground of that orderly development of their inner lives which stands for experience to each of them. Under the figure of the Choice of the Best Possible World Leibniz expressed the thought that the ground both of the world's existence and development is a highest Ethical Value. To apply his conception of development to history would perforce have been very difficult for Leibniz, inasmuch as the evolution of each member of the system must be rigidly determined from within, and his philosophy excluded the notion of fruitful interaction of elements with one another.

Both in the theoretical and practical philosophy of Kant, in many ways under the influence of the eighteenth century, the notion of development is notably in the background. Still, in his *Lectures on History* we find him putting forward the idea, often to be repeated by others, that the aim of history is the development of all the natural capacities of man. For a more striking exposition and enforcement of this idea we must turn to the work of Herder. A new and deeper view of history had already been given by Lessing, who applied in the historic sphere the notion of development learned from Leibniz. But it was Herder who first, in an impressive and comprehensive manner, treated historical phenomena from this point of view. Both in nature and human life he saw the tokens of a great process of growth; and even those who (like the present writer) have only a slight knowledge at first hand of the *Ideen zur Philosophie der Geschichte der Menschheit* are struck by the boldness and confidence with which he carries the idea of development from the organic into the spiritual world. In both spheres a similar drama is advancing to its goal. History for Herder is just the development of human nature towards a perfect humanity which takes the form of freedom. The movement unfolds after the fashion of a natural organism, and the religious optimism of the writer enabled him to pass somewhat lightly over the failures and the ruin brought about by conflicting human wills. Despite the suggestiveness of Herder's theory and its influence on Hegel and others, it must be said that his use of the term development is vague

and uncritical: and this is apparent from his failure to draw any clear distinction between natural and spiritual evolution.

Hegel's grasp of the notion is of course more subtle and profound; it was substantially a revival of the Aristotelian idea. Development for him meant the unfolding of what has already potential existence, and its course and end, alike in the regions of nature and of mental life, are determined. Nothing, strictly speaking, can arise *de novo*, and the process is only a bringing to manifestation of what already has being somehow. The same movement of thought takes place in all levels of existence, and Hegel has no hesitation in affirming that what is substantial in history is mind and the process of its development.[1] Thus we find him saying: "As the germ carries within itself the whole nature of the tree, the flavour and the form of the fruits, so the first vestiges of mind virtually contain the whole history".[2] The essence of mind is freedom, and Hegel declares that freedom—the full and harmonious realisation of human capacities as Herder put it—is the goal and moving idea of history. But the universal Idea can only work itself out in the medium of particular human interests and passions: the two in their inseparable connexion constitute the warp and the woof of the growing web of man's history. The Particular stands in the foreground and enters into oppositions and is involved in conflicts: the Idea stands in the background, and through the shocks and jars of time calmly and inflexibly brings forth the predetermined end.[3] It is here that Hegel shows that there is a difference between natural and historic development; for in the former the process goes on in an immediate and unhindered way, while in the latter progress is through antagonism. And this because in the sphere of history the passage of the Idea into realisation is mediated by human consciousness and will.[4] It is no part of our purpose here to consider how Hegel treats history as the realisation of freedom with reference to the historic nations. But there is a point in Hegel's conception of historic development on which he himself lays stress and which deserves notice. It is most important, he says, for the understanding of history, to grasp the conception of change, the process of transition.[5] The fact is borne home to us by the thought of ruined cities and vanished empires. Yet as life dissolves in death, so out of death arises new life. There comes a point, Hegel thinks, in the history of a people as of an individual, where that

[1] *Philosophie der Geschichte*, p. 21, ed. 1848.
[2] *Op. cit.*, p. 23. [3] *Op. cit.*, p. 41.
[4] *Op. cit.*, p. 68. [5] *Op. cit.*, p. 90 ff.

opposition between the latent ideal and the actual which is the spring of progress, is overcome: it has now realised the function which it had in it to fulfil. The nation's historic office is discharged; the fruit it brought forth goes to thrive elsewhere; and it can only linger on in the life of custom. In the true sense there is no dislocation of the process, for the spirit which has wrought a relative completeness, by its negative movement transcends the given stage in order to find an ampler fulfilment. The strict continuity of the movement is asserted by Hegel when he declares that the stages which, from one point of view, are a succession in the past are really eternally present in the inner depths of the Universal Spirit. The different national spirits are only the moments by which the Idea rises to a self-inclusive totality and comes to its goal.[1] Contingency is excluded, and each element has its determinate meaning and function in the movement of the spirit.

Here we have the most profound and thorough application to history of that idea of development originally outlined by Aristotle. The difficulties it raises need not now be discussed; they will to some extent be dealt with when we consider the general applicability of the idea of development to history. Meanwhile it may be well to refer to the less speculative use of the principle in the sphere of history by men like Spencer, Comte, and J. S. Mill. Here the thing insisted on is the presence of causal connexion between the parts and the evidence of the reign of uniformity in the region of historical phenomena. Mill, to whose statements we confine ourselves, thinks that "that which is only probable when asserted of individual human beings indiscriminately selected, [is] certain when affirmed of the character and collective conduct of masses".[2] At the same time he admits that as regards the succession of historical phenomena our inference can at the most amount only to an empirical law, not to a law of nature. Yet this is not because the uniformity is less strict, but because it is due to our imperfect knowledge of the conditions. Historical science, like meteorology, is not certain in its deductions, but in either case law reigns. The aim of social dynamics would be achieved, "If every one of the leading general circumstances of each generation were traced back to its causes in the generation immediately preceding".[3] Progress, in so far as it exists, Mill agrees with Buckle in attributing mainly

[1] What we construe as future is eternally realised in the Absolute.
[2] *Logic*, sixth ed., vol. ii., p. 428. [3] *Op. cit.*, p. 519.

to increase of intelligence. The important feature in the views of Mill and those who follow him is, that they recognise no qualitative difference between historical and natural laws. They do not seek to interpret human progress through final instead of mechanical causes. Historical movements are explained rather by what has been than by what is to be; the cry is to establish continuity with the past rather than to recognise the appeal and indwelling power of the end or ideal.

In Hegel and Mill, then, we see two well-defined types of historical philosophy which have points both of contact and of difference. Both agree in fully maintaining the sway of the principle of continuity: neither would admit the emergence of elements *de novo* in the historic process. But while for Mill the succession of historical phenomena is to be explained by an extended application of the principle of causal connexion, for Hegel it is to be interpreted through the idea of development. Here the end dominates the means, and for the deeper understanding of what is we must not simply consider what has been but what is to be. Whether either method is satisfactory is doubtful, but the only way to reach a decision on the subject is by a closer examination of the idea of development itself.

If we regard the principle as it is illustrated by the growth of organisms, we find presuppositions involved. There is first of all a determinate basis called the germ, then a continuous process within the germ in virtue of which it assumes successive phases, then an end which is set over against the beginning and contrasted with each intermediate stage. The further assumption is made that the end is that for which the beginning was, and controls the movement throughout. In other words, organic development in its specifications depends primarily on internal character, and only in a secondary degree on external environment. The urgency of the teleological concept is partly due to the felt inadequacy of the ordinary causal view. For when we think out what the common idea of cause implies, we are inevitably led to the notion of the interaction of elements within a whole; and this whole conditions the interaction of the particular parts, which interaction regarded in abstraction from the rest is termed cause and effect. And when we identify the relation of parts and whole with that of means and end, there is truth in Kant's contention that end is the complementary notion to that of cause and one involves the other. Obviously, however, this conception as it stands does not meet the case of development which requires progress in

time, and where, in order to secure the operation of the final whole throughout, we postulate its potential or implicit existence in the earlier stages. Here the idea of cause is not merely completed, it is transformed by the idea of end; and the question lies to hand, Can we justify the notion of an end implicitly operative? It has been objected that by teleology we simply give the semblance of explanation by repeating as ground what we find as consequent.[1] But this criticism, it seems to me, depends for its validity on a particular application of the idea of ground. If it is taken to mean that the developed consequent really exists in miniature form in the germ from which it exercises a definite propulsive energy, then this no doubt is a sheer assumption, not a justifiable hypothesis. The problem raised by development is in no way furthered by denying the validity of the idea of final cause. It has been truly pointed out that our subjective experience has given content to the notion of end. Our sense of voluntary effort or effective causality embodies itself in our representation of end as something to be achieved, and our feeling-consciousness invests the realised object with a value as contrasted with the means. Nor do we deny that without the feeling and volitional aspects of our nature we should not evolve the teleological view. At the same time it is necessary to remember that it was experience itself out of which this idea grew and was generalised; and so it must be *bene fundatum;* there must be that of which it seeks to be the expression in the constitution of experience. And this would hold even if it could be shown, as has not been done, that our idea of end is an illegitimate construction from our experience. Moreover it may be urged that the notion of end coheres with the principle of continuity without which we could not make our experience rational. Indeed teleology is only a more highly specialised application of the principle of continuity. And the intellectual need we are under of so thinking experience is justified by the practical success with which the ideas work.

In what way, then, do we hold that teleological process obtains in nature? Evidently we must postulate that the elements which constitute the beginning prefigure in their character and disposition the complete result, and yet not in the sense that by themselves they are the sufficient means to the result: elements from without are always necessary.

[1] Adamson, *The Development of Modern Philosophy*, vol. ii., p. 187. Prof. Adamson's criticism is exceedingly acute, but also, it must be added, very unsatisfying.

Further, if the end does not operate throughout, the process is not intelligible. We speak of the process having a law of growth, which law determines that the elements in the process of differentiation stand in definite relations to one another and the whole. If we say that the end which finds working expression in the law is only a subjective point of view, we simply make development a mystery. It is more profitable to ask what meaning the term law can have in this connexion. Evidently it cannot connote an ideal principle which rules the elements from without, and invests their actings with a necessity to which they would not otherwise be subject. Law is a name for the way of acting of the elements which are supposed to illustrate it, and expressed as a generalised formula is useful for purposes of description but not of explanation. A law of nature is essentially abstract; it expresses only a particular aspect of the behaviour of things, and its necessity is hypothetical; and the more concrete the experience the less adequate will be the attempt to express it in terms of mechanical law. Accordingly the explanation of organic growth must lie in the character of the elements themselves, which by their interaction make such growth possible. These elements are 'compossible': each is qualified by relation to the rest, and so all are subject to the limitation implied in mutual determination. The question is, then, What do we mean when we say that the given whole has a disposition to work out a particular line of development? If a mechanical propulsive power, a *vis a tergo*, is excluded, we seem compelled to postulate something in the connected elements which corresponds to awareness of the end to be produced, and conative impulse towards it. That is to say we have here something which, on a higher grade, appears as instinct, and finally as conscious volition. In other words the ultimate essence of the developing object is related to the psychical life, and so operates under the principle of end or final cause. The existence of a real continuity between the rational will in man and the conative life of a lower organism is our ultimate justification for interpreting living process through the idea of end, an idea whose psychological origin is in our own volitional experience. If this statement is accepted, it follows that the mechanical interpretation of experience can at no point in the scale of being be true, but it is less untrue in the lower than in the higher ranges of psychical existence. You can use the mechanical conception with good results in the case of a planetary system, while it is notoriously inadequate if applied to a social whole. But the temptation to

transfer methods which are useful in a lower sphere to a higher is great; and the language of natural science has been applied to society with misleading results. Phrases like 'social statics' and 'social dynamics' introduce a false simplicity at the outset and conduce to defective theories in consequence.

On the theory we have so far advanced we have now to ask, whether we can interpret historic progress as an organic development. Ere we try to come to a decision on this point, let us note certain differences between the conditions which obtain in the two spheres. And, in the first place, the elements which enter into organic development, if in their essence psychical, are nevertheless not self-conscious. There must be a difference in the reactions of a factor which stands on the level of conation merely and those of another which stands on the level of self-conscious will. For man plays a conscious part in his own development and a plant does not. We cannot suppose that antecedents are taken up into the focus of self-consciousness, whence they issue as consequents, and that the self exercises no efficient causality in the process. In the case of a psychical whole whose reactions are instinctive, the end may operate in the part with a uniformity which has the semblance of being mechanical. But with the self-conscious individual the relation of his conduct to the end will depend on the way he takes the end up into his conscious purpose. Hence in the historic life, which consists in the interrelated actings of a multitude of self-conscious individuals, the principle of teleology finds an altogether fuller and higher expression. A feature which emphasises the distinction between organic and spiritual or historic development is the presence in the latter of the momentous contrast of what *is* and what *ought* to be. As Prof. Ward has said, in history purpose carries with it the notion of good or worth, and the great difference between nature and history is that between what *is* and what *ought* to be.[1] Science and history set out from the same world of experience, but the one proceeds outwards, the other inwards: so the one deals with connected facts, the other with related values. To the historian progress means the realisation of value, and he appreciates events and characters by their relation to some value conceived as end. It may be objected that the contrast of fact and value is drawn too sharply, and it may be argued that the difference between what is and what ought to be is represented in the develop-

[1] *Vide Hibbert Journal*, Oct., 1905.

ment of an organism. The 'ought' is just the fulfilled idea, the completed process of growth, and each partial phase of evolution has to be transcended that the end may be achieved. But we have only to compare this conception with spiritual process to see that it does not rightly apply to it. The elements of an organic body have no meaning for themselves; in a social whole each unit has a unique self-meaning. In the one case we say the end *has* to be, in the other it *ought* to be, and the difference in the terms expresses a significant difference in the processes. Moreover in organic growth each phase has a positive function and value as a step to the end: on the other hand, in spiritual development we find within the process itself elements which impede the realisation of the end and which ought not to exist. By no fair interpretation of the facts can we identify natural imperfection with moral evil. Hence historic development has a new complexity and depth of meaning as compared with natural growth, and this because of the unique individuality of the elements which go to constitute it.

There is a further consideration which should make us careful about trying to construe historical development after the analogy of organic growth. In all organic growth the process starts from a definite basis, which as beginning we contrast with the end. And the question lies to hand, Is it always possible to specify such a determinate basis in the case of historic development? Here we might take up the question discussed by Dr. M'Taggart, whether society is justly entitled to be called an organism. And it is plain that if we accept Dr. M'Taggart's definition of organism as that which is the 'end of its own parts,' society cannot be fairly regarded as the final end of the individuals who compose it.[1] On the other hand, it might be said that, though society is not a perfect organism, still it reveals some of the essential features of organic development: and especially that the historic process is the unfolding of an immanent idea operative from the first. Here the difficulty already mentioned confronts us, the difficulty, namely, of assigning a determinate basis on which the process begins and a well-defined whole

[1] *Studies in Hegelian Cosmology*, p. 185 ff. One may doubt whether Hegel, in view of his treatment of the state as the objective Will and the realisation of Freedom, would have accepted Dr. M'Taggart's statement as an adequate interpretation of his own doctrine. On this point, see the instructive remarks of Prof. Bosanquet, MIND, N.S., No. 25. But I have no claim to speak with authority on the subject, and after all the point is not of importance for our present purpose. Dr. M'Taggart may quite well be right in the view he advocates, but wrong in supposing that Hegel would have endorsed it.

persisting through change within which the idea works. Shall we take the nation as the unit within which historic development manifests itself? then we find it impossible to apply the rule that the whole moves altogether, if it moves at all. Within the whole we encounter very various degrees of spiritual culture, and while certain elements are progressive and make history, others are so fettered by prejudice and custom that instead of co-operating in a forward movement they are a positive obstacle to advance. Moreover, among the progressive parties there is commonly divergence of spirit and tendency, which issues in antagonism and conflict over the course to be pursued. Nor is it an unusual thing for the reactionary elements in society to triumph for a time at least. These facts, if they do not disprove development, at all events show that the phenomena are too varied and complex to be satisfactorily interpreted on the analogy of organic growth. And, if further argument were needed, one might point out that, while in the physical organism the inward principle is of primary importance, and the environment, if essential, is still of secondary importance, the same cannot be said of any social whole which you choose to regard as the basis of historic development. For here interaction with other social wholes—tribes, nations, or races—is as important for the progress of the given social whole as its own internal character. To put it concretely, the historic development of a nation cannot be deduced from any assumed fundamental character of that nation, taken in abstraction from the influence of other nations.

Still more difficult is it to justify the application of the term 'organic development' to the history of particular phases of culture within a society. Phrases like the 'development of art' and the 'development of religion' occur very frequently, and convey a sufficiently definite meaning for practical purposes. But when you push your analysis a little deeper, you may find the phrase is made to cover unjustifiable assumptions. For the language used often suggests that the particular type of culture has a vital principle within it, and unfolds its meaning by some inherent power of its own. It is needless to say that in speaking thus people personify an abstraction and treat it as having being and energy for itself. In truth a particular phase of culture only exists as an element in the self-conscious life of individual persons. To recognise this, however, is to recognise that the spring of progress is not in the given phase of culture by itself, but in the self-conscious minds of which it is an aspect. Accordingly it seems to me false to say that religion, for example, has a

constitutive idea which can explain all the characteristic features of its evolution in a race. For religion as a state of the subject interacts with the other contents of self-conscious experience, and if it helps to mould these, it is equally moulded by them. That is to say, the evolution of a people's religion can never be explained by isolating some particular feature of it and calling that its constitutive idea. It has developed as part of a larger interaction of elements, among which we reckon the political, the artistic, and the scientific consciousness.

The drift of the foregoing argument has been to show, that the key to the meaning of historic development is not to be found in a generalised conception of the process as a whole but in the psychical life of individual selves. For the constitutive forces which make for progress, whatever be their ultimate explanation, have their living centre in the self-conscious minds which, by their interaction, produce development. Psychical events in men are the real kernel of history, as Sigwart justly remarks.[1] Any profitable discussion of the larger question must, therefore, base itself on the cardinal features of psychical development. What are these features? Here I make no pretence of saying anything new, but am content to state the results to which the best recent psychology points. Mental development is throughout teleological, and so in its lowest as well as its highest phases. In mental process the equivalence of cause and effect, which we attribute to natural process, is not found; and no analysis of sensation-elements, for example, will explain how they come to be represented by a sense-perception. So instead of interpreting psychical development causally, we must read it as a purposive process which takes form in a continuous 'acquisition of meanings'. The point of view is inward, and the end functions in the conative unity of the subject. Hence we regard mental development, with Prof. Stout, as the study of conscious endeavour as a factor in its own fulfilment. We reach no satisfying insight into the process, if we treat it from the outside and try to establish a causal connexion between the elements.

In harmony with this inward reading of mental development, we find that its facts are more than facts: they are values, and each value stands for a unique experience. Mental contents in the individuals A and B which we treat as the same, never mean exactly the same to each: there is a qualitative difference between them which is

[1] *Logic*, vol. ii., p. 441, Eng. Trans.

bound up with the unique self-feeling of the two percipients. And it may be pointed out that the ultimate justification for maintaining the unique character of historical succession lies in the fact, that history is a complex amplification of the psychical process in the individual.

Some further observations may be made in this connexion. On any level of psychical life purpose is practically operative though the end is not the object of conscious reflexion. But the end always forms part of the content of will in the higher spiritual and artistic creations, and at each stage it is in some degree the object of self-conscious endeavour. On the other hand, it is true that the ends which ordinarily move us are proximate not final ends. And as a matter of common experience, the more distant objects of desire seem to define themselves and take on practical importance largely from the way in which we achieve our more immediate purposes. Still it may be said that the remote end really moves us even in the region of common experience, and the final purpose is really latent in the proximate purpose which is its means. On this view the latent purpose would be an aspect of the reflective purpose, an aspect which is always coming into clear consciousness. Now it is true that a man seeks more than he can clearly define at any one point of his history, and as he ages he learns much. But the facts do not warrant us in trying to press the view before us into the service of a determinist theory of mental development. Both in the personal and collective history ideals are subject to growth, modification and decay; and it is to beg the question to say that an ideal which prevails must have been implicitly present from the first. Here the matter is settled not on the evidence but by an *a priori* assumption, and the assumption is not indispensable that the process may have meaning. The way is open for us to hold that ends which have become objects of conscious endeavour to an individual or a society in the later stages of growth need not be latent in the earlier. None the less these remarks must not be taken as suggesting that remoter ends do not play a part in personal and historic development. For some who deny this come in the result to a non-rational view of all human progress. This opinion is held by one or two writers in our own country, and it has been forcibly advocated by Prof. Villa in his recent volume, *L'Idealismo Moderno*. Villa's psychology is based on that of Wundt, and he lays the greatest stress on the constitutive function of proximate ends in development. From this he is led to deny that more distant ends are really operative, and to affirm that

the cogency of the proximate end is entirely a matter of the feeling-consciousness. So man impelled by certain value-feelings strives after nearer objects, but he neither knows nor concerns himself with the remoter issues of his choice.[1] In harmony with this, Villa expressly declares that history is the very antithesis of logic. It may be argued in support of this doctrine, how little of conscious purpose there seems to be in the evolution of a nation, how little clearness and concord as to ultimate aims among different classes of the people. I venture to think, however, that this is a theory which, starting from a sound psychological principle, overstrains it, and in the result seriously misconceives the teleological aspect of history. While the nearer ends are of most pressing moment, the more distant ends are also kept in view, for man is a being 'of large discourse' who looks 'before and after'. If immediate feeling is the constitutive force of history, it is hard to see how there can be progress; for feeling unqualified by a purpose which extends beyond the present resembles instinct in its working, and instinct, though it serves to perpetuate the species, does not minister to progress. But Villa's assertion that the immediate ends to which feeling prompts express values would seem to carry us further than the realm of feeling. For that which has value must have meaning and be distinguishable from other values. And since we exercise selection on our proximate ends, assigning to some more and to others less importance, it is obvious that we do so because we have introduced a certain coherence into our value-ideas by connecting them with some standard of value. That human conduct has a measure of order and consistency in it is only possible because the variety of approximate ends is appraised and co-ordinated by reference to a general end or higher good. This good, although not to be realised as an immediate end, operates in our choice of such ends, as is amply shown by the way in which man controls an immediate desire in the interests of his larger well-being. And the same holds true in the history of a society or a people. The policy of a nation is never determined simply by the proximate ends to be achieved. In selecting among such ends it will be found that the past history and the aspirations of the people work as influential factors, and that the nation not only considers what will serve the purpose on hand but owns the duty of bringing the policy of the day into accord with the national ideals:—

[1] *L'Idealismo Moderno*, 1905, pp. 205-209.

> Tu regere imperio populos, Romane, memento;
> Hae tibi erunt artes, pacisque imponere morem,
> Parcere subjectis, et debellare superbos.

Probably it is not necessary to labour the point further. But what we have said leads naturally up to the question in what sense and in what degree the principle of continuity obtains in historical development. Already we have come to the conclusion, that the form of evolution which is the constant unfolding of an idea potential in the beginning and strictly fixed in all its stages cannot be shown on the evidence to apply to historical development. Still it is plain that, though there be not a rigidly determined continuity in the historic process, continuity of some kind there must be; otherwise there could be no field for the historian who shows how the past prepared the way for the present and how the present is 'great with the future'. Neither in the case of individual nor people can we satisfactorily understand its conduct to-day in isolation from its actings in bygone days. At this point in the argument it is necessary to distinguish between the general or universal element in the historic process and the individual element. The existence of both aspects is indisputable, and the important thing is to relate them rightly to each other. The interaction of mind with mind within a social order goes to build up fixed dispositions and tendencies which have a collective value and perpetuate themselves. Although these general functions are only actualised through individuals, we do not find their explanation and source in the individual. Such social products as speech, custom, and belief, while they pervade society like an atmosphere and vitally affect the individual, are not the creation of private initiative and invention, but the outcome of social wants. Consequently they do not reflect the fluctuations of individual desire, but reveal the uniformity and constancy which fit them to function as the instrument of the continuous life of the collective whole. These universal, social creations go to constitute the mind of the individual, and they form the general background of his thought and action. What is personal in the individual's character must be developed upon this common ground and cannot be distinctive apart from it. Accordingly the attempt is sometimes made to bring the individual element in culture under the dominion of the universal, and to regard men of light and leading simply as the embodiment of tendencies potentially or actually at work in society. So J. S. Mill, while he thinks it wrong to attribute only a trifling influence to great men, yet lays the stress on that aspect of human

evolution which can be 'reduced to uniformity and law'. In harmony with this we find him saying that the influence of great men operates rather in determining the *celerity* than the *direction* of movement.[1] Even more distinctly does Hegel make the individual factor in history depend on the universal. The great man is only great because the universal is immanent in his ends: his function is to bring the general unconscious inwardness to consciousness.[2] Nor indeed is any other result possible for those who hold that historic development is a strictly determined movement. The view, again, which lays stress on the individual element in development is sometimes called the 'Great-Man-Theory,' but it has not won the same amount of support as the other. A prominent advocate of this view was Carlyle, whose enthusiasm for dominant and heroic personalities led him to term history 'the essence of innumerable biographies'. On the same side Prof. W. James has spoken some trenchant words: "The causes of the production of great men lie in a sphere wholly inaccessible to the social philosopher".[3] In contrast to Mill he traces the mutations of societies mainly to the examples of individuals, and thinks that the accidental presence of men of genius is the ferment which decides in what way society shall evolve.[4] In his own words, James emphasises the importance of 'individual variations,' not the 'dead average': but he sees that the indeterminism is not absolute; "not every man fits every hour". And one can sympathise with his outspoken declaration: "It is folly to speak of 'laws of history' as of something inevitable".[5] It is important nevertheless that we should not so exalt the individual aspect of historic development as to lose sight of the universal aspect, for in the latter case it is hardly possible to speak of development at all. If we resolve the historic movement into centres of personal influence, we ignore the essential fact that it is only through their interaction within a whole that the process can have meaning and value. It is indeed true that psychical events in men are the kernel of history, but these psychical events are not intelligible apart from the social and spiritual environment which supports them. The action of well-known personalities can only show against that relatively stable background which embraces law, morality and religion. These change; but they change slowly, and the effect of any isolated individual upon them is necessarily small. The pioneer of progress can

[1] *Logic*, sixth ed., vol. ii., pp. 535-537.
[2] *Phil. d. Geschichte*, pp. 37-39.
[3] *Will to Believe*, pp. 225-226.
[4] *Op. cit.*, pp. 227-229.
[5] *Op. cit.*, p. 244.

only bring about progress by making the many experience the force of his appeal: as Lotze has said, "Any personal power requires for its efficiency the receptivity of the masses".[1] And to realise this is to realise that a continuity will always be maintained between the present and the future.

The course of the discussion has brought us now to the point where we must try to give a definite answer to the question, how far the historic process is continuous. Put briefly the thesis we wish to uphold is this: the degree of continuity in development which satisfies our logical and ethical demands is not a continuity which binds progress down to one particular line. That is to say, within limits alternatives are possible: the previous development does not determine that only one of these alternatives can become actual. And here we must dissociate ourselves from the Kantian view, that successive events can only be taken up into the content of the one self-consciousness in so far as they are connected by the self in accordance with the principle of cause and effect. This is a proposition of which Kant never offered any satisfactory proof; and if we may trust our own experience on this matter, we certainly can have knowledge of a succession without also qualifying it by the causal predicate. And this is still more obviously true in the region of psychical events, where we cannot say that *a* is the cause of *b*, *b* of *c*, and *c* of *d*; for, while there is connexion, the connexion is teleological, resting not on the structure of the elements of the series but on the conative unity, the active interest of the self. Or, to put it otherwise, the connexion is not in the facts but in the active self of which they are the expression. So likewise in the case of moral action you cannot postulate character as a fact in time which, in virtue of its inherent causality, brings about a determinate succession of temporal acts. For it is a mere assumption that a man's character can be regarded from without as a complete whole, so that each act in time is related to it as effect. Here again the fallacy seems to lie in taking the elements as if they had a connexion for themselves, while in reality it is the inward self which relates them to each other. Viewed from without, character as a whole of habits, dispositions and tendencies is identified with the self. But here it must be remembered that we are qualifying the self by predicates which to some extent are discrepant. And so long as the self does not will as the

[1] *Microcosmus*, vol. ii., p. 192, Eng. Trans.

completely unified character, the diversity within character makes it possible that a man's act should always be related to some aspect of his character, and yet that there should be an element of indeterminism in his self-development. In the psychological problem we postulate the apperceptive activity and selective interest of the self as giving coherence to mental events: in the ethical problem we postulate the self as will which relates choice to some aspect of character, and which is the ultimate ground why, when there is conflict of motives, one aspect of character is expressed in action rather than another. In further support of this theory of moral freedom I would urge that it seems on the whole to square best with the facts of moral experience. It may be well to repeat also that it is necessary to distinguish the judgment of the spectator who interprets from that of the person who acts, and I venture to think that personal experience lends some countenance to the view here put forward.[1]

The interpretation we give to the freedom of the individual cannot but materially influence our way of regarding historical development. A strictly deterministic theory of personal character must have as its correlate the purely necessarian conception of collective evolution. What seems contingent in the historic process only wears the appearance owing to our imperfect knowledge; to a more comprehensive insight it would appear as a necessary factor in the general movement. To us, on the contrary, historical development in virtue of its individual aspect will always have a contingent element whose operation is real if subordinate. That it must be subordinate is apparent when we consider that what is distinctively new, even in the most gifted individual, must be relatively small in comparison with what he derives from the culture of the past and his social environment. And even the reformer who is in keen antagonism to an existing social order has his significance in virtue of his positive relation to the system against which he reacts. If the reforms he introduces are not susceptible of an organic relation to the existing structure of society, they must perish for lack of life. But to affirm this does not preclude conviction that there are points in history where alternative courses were possible: we may assert this and still give a legitimate scope to the principle of continuity. For it must be remembered that these diverging possibilities are not introduced *ab extra* by great

[1] That it does so has been conceded by so careful and unbiassed a critic as the late Prof. Sidgwick. *Vide Methods of Ethics*, sixth ed., pp. 65-66.

personalities, but are prepared for and presented by the prior development. To take a rude illustration. At a particular point it might be possible to divert a stream in one direction rather than in another, but the possibility is given by the previous course of the stream itself. With a different direction, or a different degree of fall, perhaps no such diversion could take place at that point. The alternatives which are open to those who 'make history' are the alternatives developed by history itself; and therefore the process cannot suffer dislocation though either course is chosen, but the issue will be different. As the outcome of the historic drama, Luther was confronted with the alternative of defying the Pope or submitting to him. It is conceivable he might have submitted, in which case the religion and political evolution of the European peoples would have been materially affected. And yet can any one doubt that that historic development could have been made as coherent and intelligible to reflective thought as the present development has been? In the light of the result the historian would have simply put another valuation on the spiritual forces at work, and if he were a determinist would have shown to his own satisfaction that the issue could not have been otherwise. Our conclusion in short is, that the process of historic development has within it a certain flexibility, but this flexibility is within the limits prescribed by the principle of continuity. In the case of personal development those alternatives only are possible which are presented by a man's character: in historic development they must be such as are presented by history itself. Hence at whatever point we examine the historic process, we shall never find it absolutely broken and disconnected. The most original genius must speak the language and use the forms of thought of his time, and no leader, however daring, can initiate a movement which will persist, unless the stream of the historic life has made the movement a possible one. It is given to a few individuals in each generation to find an answer to the problems of progress: the problems themselves have been set by the historic life of humanity.[1]

But while there is continuity in history, we cannot say that the movement is continuous in one direction, the direction of progress. A Philosophy of History, however optimistic its tone, has to find a place somehow for such facts as the decadence and final disintegration of a nation's life. Indeed the stream of culture seldom runs smoothly for

[1] *Cf.* Lotze, *Microcosmus*, vol. ii., p. 188, Eng. Trans.

a long space: it breaks into eddies in its course, and at points the current seems to move backward rather than forward. The ordinary spectator would hardly question the view that history presents at many points the spectacle of a loss, not an increase, in value. To this the reply from those who profess to look deeper will be that the loss is apparent rather than real, since it is compensated for somewhere and somehow. So it might be urged that the loss implied in the decadence of the intellectual and æsthetic gifts of the Greek, and of the Roman genius for law and civic order, has been more than counterbalanced by the contribution these peoples have made to the wider culture of the Western world. Yet it would hardly be possible to show by any broad inductive treatment of history that the principle of compensation always holds, and that there never is a good really lost. The conviction that 'all things work together for good' can never approve itself to us as a simple generalisation from the facts: it is a postulate which rests on other grounds. The problem pressed on us here is one which we must deal with if we are to reach a satisfactory conclusion on the main point of our inquiry, which is the applicability of the idea of development to history. For development in the proper sense is more than continuity of process; it means that through the process an increase of value is brought about, and that the end is better than the beginning. When we put the problem in this way, we see that the answer is by no means a simple one and raises some perplexing issues.

The first question is: How are we to decide whether development is present in history or not? For it sometimes happens that the movement which one person terms progress another pronounces to be on the downward way, and the phase of culture which is rated highly in one epoch finds only a slender appreciation in another. Plainly this is because the ideas of value which form the basis of the judgments are not the same. And we can only come to some agreement as to the degrees of value revealed in the stages of the historic movement, if we agree on the standard by which we are to judge. If, for example, the theory of Eastern and Western Pessimism is correct, history is an evolution which spells deterioration; for it is a lapse from the unconscious which is best. Hence the paradox that the process of history brings about an increase of value by itself running out to a close. Such a theory of the good precludes the idea of a development in time, and is best refuted by the personal instincts and practical tendencies of mankind. History itself does not speak a clear word on the matter at

issue, for history, as has been said, is the "battlefield of values," and the ideal takes new forms with the changing life of humanity. Yet we cannot remain enclosed in the sphere of relativity, and merely try to judge one type of culture by reference to another. For in the end we must either declare some type to be of primary worth, or relate the different types to an ideal as of ultimate value. Now we may agree that the ultimately valuable must be some form of 'desirable consciousness,' but to fill in the content of this consciousness is exceedingly difficult.[1] There is, however, a certain amount of agreement over the direction in which we are to look for the ultimate Good. For instance few thinkers of importance at present would argue that the Absolute Value is to be construed in terms of pleasure, though pleasure may be an element in it. The trend of thought is to find the Supreme End or Value in a heightened form of the personal life, in the full and harmonious realisation of personal capacities and powers.[2] For it must be through existing values, and more especially through the values realised in the ethical life, that we try to define for ourselves the general norm of our valuations. The ethical end from a formal point of view is adequately described by the term 'self-realisation,' taken to mean the making real by the will in the given personal life of the projected idea of a higher self. And the end of society would be to minister to the fullest, most varied and harmonious expression of the powers of human nature, in short to subserve the development of personalities. Hence we can accept the test put forward by Höffding, here giving a fresh turn to Kant's thought, that perfection in a society is the degree in which each personal being is so placed and treated, that he is not only a means but also at the same time an end.[3] To those who object that such a test of social value is only formal, the thing to say in answer is that no other answer to the problem is possible. The traveller cannot describe in detail the country which as yet he only beholds afar off. The degree in which we have already realised value in our own lives is the only clue we have by which imaginatively to give content to the Ultimate Value.

[1] Prof. Mackenzie (*Social Philosophy*, first ed., p. 270) speaks of the ultimately valuable as what belongs to the consciousness of the world as "a systematic and harmonious totality". This is vague. Nor is it clear why the consciousness of the world as a harmonious system must be the most valuable form of consciousness.

[2] One may see tokens of this tendency even in such definitions of the ethical end as 'self-conservation' and 'increase of life'.

[3] *Philos. Probleme*, p. 89.

That the Ultimate Value must be conceived in terms of persons can scarcely be doubted when one remembers that only in the personal life is value actualised. Every judgment of worth has reference to a self-conscious subject, and a society has neither mind nor will apart from the individual persons who compose it. We talk loosely of the value which pertains to a definite type of historical culture, but in the last resort we must think that value as present in the spiritual subjects who, by their thought and will, give actuality to the form of culture in question.[1] Taking, then, this personal view of what is ultimately valuable, and bringing this standard to bear on the process of history, we ask: Is it possible to describe that process as a development in the sense of a movement from less to greater value? The vagueness which attaches to the content of the ideal must militate against a confident dogmatism on this point. We may indeed reject the pessimistic theory of history with some firmness of conviction in virtue of the unjustifiable assumptions which it makes at the outset. And there is surely some warrant for the belief that the growing significance of personality, which is observable in the course of civilisation, is the sign of an advance in inner value. No doubt, as we have already seen, a calm survey of history does not entitle us to infer a uniform or consistent progress. At points the stream becomes stagnant, and sometimes the current moves backward. The state in one aspect is a means towards the development of the personality of its citizens, but the state may decline; and corresponding to this the personal values of life will become poorer, as, for example, was the case with civic life under the later Empire of Rome contrasted with that in the palmy days of the Republic. But if we take a broad view of the historic movement, we seem justified in concluding that our Western civilisation at all events shows a real increase in the virtues of humanity, justice, and freedom. And if there have been losses of value in particular directions, we may fairly argue that these are balanced by a wider diffusion of good and a better opportunity of realising capacity. With some degree of assurance, accordingly, we hold that, on the average and over a wide area, the evolution of culture represents an increase in the value of personal lives. And our right to apply the notion of development would briefly be this. The process, if plastic and susceptible of modifica-

[1] *Vide* Grotenfelt, *Geschichtliche Wertmassstäbe in der Geschichtsphilosophie*, p. 165.

tion from within, is still continuous. If there are losses in value there are also compensations. And in the light of the Ultimate Value, so far as we are able to define it, we judge with some confidence if not with certainty, that the movement of history discloses an increase of value in the line of the end or final Good.

We have reached a result, somewhat qualified indeed, yet so far definite. But our difficulties are not over, and if our argument is to be profitable these difficulties must be met. The objection will be urged that no value which is in process can in the nature of the case be final; while if the Absolute Value is conceived as a final state, the idea seems to lose what in our eyes is an essential quality. For to us the ethical values are ever associated with personal endeavour and the progressive realisation of the good. When we try to conceive the movement of history coming to its goal in a social order, the constituents of which are perfect persons, we cannot help feeling that such a life without spiritual ideal is something less than the highest. The life of growing goodness has an intrinsic quality which makes it preferable to that of stationary perfection; and a mundane society where upward endeavour and progress are impossible does not seem to us, as we are constituted, desirable. An attempt may be made to find a way out of this perplexity by discarding the idea of the Supreme Value as a fixed state, and asserting that what is ultimately valuable lies in the process of development itself. The final Good is just the continuous evolution of values. But here the old problem of a valid norm is thrust upon us again. For how is the standard to be defined where all is process? Clearly, as Siebeck has argued, we would have to define the Absolute Value in terms of the stages in which it is realised, and these in turn could only be appreciated by reference to the Absolute Value.[1] Besides involving ourselves in this awkward circle, we should have to meet the objection that moral evil with all the antagonisms it provokes is a constituent element of the Supreme Value, and that sin in all its forms is unreal or merely good in the making. The argument followed out in either direction seems to lead to an *impasse*, for neither the idea of a perfect final state in time nor that of endless progress in time satisfies the demands of a consistent theory.

The truth is that, if we try to think out coherently the implications of the notion of development as applied to

[1] *Vide* his *Religionsphilosophie*, section on "Die Bestimmung des Menschen"; also his *Rektorats-Rede*, *Ueber die Lehre vom genetischen Fortschritte der Menschheit*, 1892.

history, we are led into the region of Metaphysics. The final presuppositions of history as of ethics are speculative not scientific. And however some people dislike the domain of Metaphysics—the scene, as they think, of incessant warfare where no victory is conclusive—our only chance of escape from the dilemma which faces us is by making an incursion into it. Now the crucial point of our difficulty in the present instance arose in connexion with the time-idea: neither a perfect final state in time nor an endless process in time was satisfactory. Shall we then say with Kant that time has no ultimate reality, but is only a valid form of perception for the phenomenal world? There are serious objections against the Kantian treatment of time which it is not possible to discuss at present; but it must be pointed out how hopeless it is for any philosophy which makes time purely phenomenal to deal with history. For the historic process, with its gradual evolution of values, must lose its meaning and worth if time is declared to be fundamentally unreal; it becomes an idle show, a 'tale of little meaning'. Neither the interpretation of time as absolutely real nor absolutely unreal seems philosophically tenable, and neither view sheds light on the problems of historic development. For, to adopt one side of the alternative empties history of value, and to adopt the other precludes any consistent way of relating the process to its goal. In dealing with this formidable question the most hopeful method appears to be that which proceeds on the principle of Herbart: *Soviel Schein, soviel Hindeutung auf Sein.* An appearance cannot float unsupported in the void; it must have reference to the real, and it must be the appearance of something. Whether you say that time appears, or is a form in which things appear, at all events it is an experience and as such must qualify the real in some fashion. And if we reject, as we are warranted in doing, the Kantian figment of a pure form of intuition read into the matter of sense, we cannot avoid the inference, that there must be that in the constitution of experience itself which imposes on individual subjects the obligation to construe their experience in terms of time. This necessity cannot have its ground in what is accidental: the question here is one of epistemological validity. This question must be carefully distinguished from that of the temporal genesis and growth of our ideas of time. The problem in this case is psychological, and the way we answer it cannot be held to decide the validity or degree of reality in the time-idea itself. Yet the psychological aspect of the matter is certainly interesting and important. The highly

developed and generalised conception of time which the modern civilised man shares is far apart from that of the primitive savage, who had no chronology and had not a generalised notion of time apart from the events which take place in it. Then in the stage of life-development represented by the higher animals, we find spatial and temporal percepts as yet undistinguished; for both are fused together in the fact of movement, a fact of the greatest importance in ensuring the conservation and maintenance of life. This varying practical attitude of living beings to time may suggest to us how the psychological significance of the idea must vary with the living interests which are bound up with it. We ought not to assume that our present time-idea, elaborated by intersubjective intercourse, is an absolute standard: a being higher or lower than man would have a different 'time-span'.

On the other hand, the valid element in the time-idea must lie in the fact that it has to be developed as a form of order out of the actual content of reality, and cannot exist as an empty form by itself. Aristotle has said that time is the measure of change, and we may agree with Lotze that the time-form could not possibly give rise to the real process of change. If this be so,—and I assume Lotze's argument to be justified—then, while the meaning of a series of events would not in all respects be the same to two beings with different conceptually developed ideas of time, still either view would be more than subjective, because grounded on the process of the real. On this theory history represents a real process of change, which we construe through our developed ideas of time, dividing it into the past, present and future. A Being for whom 'a thousand years are as one day' would see farther and deeper into history than we do, but this would not make our view illusory. The speculative examination of the time-idea does not take away our right to predicate development of history, though it suggests that limitations attach to our use of the principle.

Yet the conclusion at which we have arrived, though it delivers us from the scepticism of treating such progress as we can see in the race as mere appearance, hardly serves to solve the problem we have on hand. The fact is borne upon us that our present time-ideas are not adequate to the representation of the goal of history. A perfect society in this mundane time-order we found to be for us a contradictory conception, nor, as we saw reason to conclude, is there any immanent law in history constantly working to bring about

such a result. Indeed the evolution of the physical universe might preclude this.[1] Finally, even granting that such an Absolute Value were to be reached in time, how are we to relate it to the personal values of the historic process? Are all earlier forms of personal good only to have their meaning as a stage to the distant goal? If so, the means and the end seem utterly disproportionate to one another, and the many are sacrificed to the few. Here we have the same moral anomaly which is involved in the interpretation of history as an 'education of the human race'. The great multitude of human beings are reduced to a mere means of bringing about an end in which they can have no share. For practical purposes no doubt it is often legitimate to treat individuals as a means to the increase of the good of the social system. But our justification for so doing is that the good of the whole is reflected in the life of the members, in other words it is expressed by an increase in personal values. And in the last resort we must stand by the truth of the Kantian principle, that persons are ends in themselves.

The outcome of the argument is that, while our reading of history in terms of our time-idea is not illusory, yet when we try to give a satisfying meaning and end to the process in terms of this idea the statement is manifestly inadequate. We seem driven to the conclusion that the goal and meaning of history are not to be found in this temporal order of things at all. The facts themselves appear to necessitate the acceptance of some form of transcendency.[2] I am quite aware that this may seem the invocation of a *deus ex machina* to cut the knot: still I venture to think that this is not a fair reading of the situation. The point, we repeat, is that we are not able to find a meaning in history, viewed as a mundane process in time, which will satisfy the reason and do justice to the moral values involved. That the process is not meaningless we are bound to assume. Accordingly we make the postulate that the ultimate meaning of history must lie in a sphere which transcends the present temporal order: and the postulate will justify itself in the degree in which it meets the demands of our moral and intel-

[1] Huxley in the Prolegomena to his Romanes' lecture on 'Evolution and Ethics' anticipates such an issue. He thinks man's struggle to maintain the State of Art in opposition to the State of Nature will go on "until the evolution of our globe shall have entered so far upon its downward course that the cosmic process resumes its sway; and, once more, the State of Nature prevails over the surface of our planet" (*Works*, vol. ix., pp. 44-45).

[2] This conclusion is accepted by Siebeck, Rickert, Eucken, and Grotenfelt.

lectual life. It will not do so if the possibility of continuity between the temporal and transcendent values is excluded. This is a point which, as it seems to me, has sometimes received too little consideration from competent thinkers. Rickert, for instance, finds the timeless necessary to give meaning to the temporal process, and only timeless Reality, he says, can be the support of timeless values.[1] Yet he holds that the temporal process must be real if there is to be a philosophy of history and a significance in moral endeavour. Nevertheless in Kantian fashion he regards the dialectic of ideas as evidence that we have reached the limits of our knowledge, and that the solution of the contradictions lies in the transcendent sphere. The difficulty here is that no way is left open of relating the mundane to the supramundane values, so that the latter might be regarded as the fulfilment of the former.[2] And if there be no continuity between the temporal and eternal values, the elements of a solution are not present and the postulate fails to justify itself.

If our postulate is to work, the transition from the temporal to the eternal must be accomplished within the personal life, and cannot come merely as the result of historic progress. For it is persons who make history and embody the worth of the historic life; and, as we have seen, we involve ourselves in contradictions if we treat them as a pure means to a hypothetical development of the race in the future. By insisting on the inner relation of each personal life to the Eternal, it seems possible to do justice to personal values and likewise to maintain that the meaning of history is being realised at each stage of the temporal process. The crucial point is whether we can so conceive the relation of the temporal to the eternal in the personal life that a continuity between them is possible. That we can coherently think out the connexion between the two is not in the least likely, and the attempt to do so would involve the importation into the higher sphere of ideas and images which properly belong to the lower. We may suggest, however, that the Eternal must not be conceived as indifferent to, or taking no notice of, the distinctions which are implied in the time-process. If it be true, as we have contended, that our present time-idea grows out of the content of the real which

[1] See his article on the Philosophy of History in the *Festschrift* for Kuno Fischer, entitled "Die Philosophie im Beginn des XXten Jahrhunderts," 1904.

[2] Eucken's position in this regard is also unsatisfactory, for he hardly discusses the relation of time to the suprahistorical and eternal life.

changes, then it may well be that what we term an eternal state of being means simply the deliverance from the limitations of our present time-span, and is not incompatible with change and activity. In the case of God we are led on speculative and moral grounds to postulate that he is above the limitations of our time-idea, but also that he is active and comprehends the distinctions of our temporal history. And if it be true that the human spirit has its ground in the Divine Spirit, we may infer that the more fully man develops his essential personality in this eventful earthly history, the more completely is he being transformed into harmony with the Divine Nature. The faith that the deepening spiritual life reaches beyond the present time-order, is a legitimate faith that the values which give meaning to this life are not subject to decay and destruction because they are of God.

The reader who has followed us up to this point may complain that we have travelled somewhat far from our original theme. Yet on reflexion he will perceive, perhaps, that we have been trying to follow the lead of the argument. He will remember that we saw reason to deny that history could be regarded as the necessary evolution of an immanent principle. Taking a broad survey of history we seemed to see evidence of progress actually achieved, but no evidence of a law of progress whose persistence was assured. Here the question emerged whether the meaning of the historic process did not depend on the assumption that it was a movement towards some perfect goal. Yet the discussion of the assumption appeared to yield the conclusion that it would not solve the problems at issue. And this led us to show that the more satisfying interpretation of history was to be found in a direct relation of the personal values to a higher order in harmony with the Eternal. On this view the meaning of history is continuously being realised, and does not depend on the mundane process coming to a perfect close.

"Do you then," it may be asked, "discard the idea of development in history? It would surely be a narrow gospel to tell men that the value of the efforts of those who 'spend and are spent' for city and country is concerned with themselves alone. Those who toil patiently to bring in a better day are inspired by larger motives!" In reply we might point out how fully we have recognised the interdependence of the personal and the social values: in a real fashion a man saves his life by losing it in a wider service. The increase of the common good is reflected in the heightened value of the personal life; and the deepest good of the self cannot be

gained apart from others. We go farther and urge that, in virtue of the solidarity of personal and social good, man must strive to further the development of society even as he strives to develop himself. Moral and spiritual progress is a vocation for the race just as it is for the individual.[1] In neither case can the process work itself out by impersonal means. The development of the race is a task which lies before the men of each successive generation, and in the degree that they fulfil this task will history reveal a growing good. As with the individual so with humanity, the exercise of freedom precludes us from characterising development by any rigid formula. In both cases we find fulfilment and failure to fulfil the higher vocation: the single soul instead of struggling upward to the light sometimes sinks back into the darkness, and in a society, and even through a whole epoch of history, we may see visible signs of retrogression, not of progress.

Development, historical and personal, is gravely hampered by the antagonistic forces of evil, and, though these are defeated, Proteus-like they assume fresh forms and return to renew the conflict on a later day. Yet those who are on 'the side of the angels' can find tokens which bid them hope. Humanity always holds within it regenerative powers, and if the potentates of evil win a victory and establish their rule, a reaction comes which breaks their sway and the tyranny is overpast. Looking backward we certainly seem to see evidence of development, though the development has not been constant nor uniform in its movement. That the upward movement will prevail, that mankind which has tasted the good things of the spirit will not relapse into barbarism and ignorance, this may well be our faith, though neither reason nor faith requires us to expect the advent of a perfect kingdom of God among men. The historic process has an ever present goal, when personal lives can through it so grow and deepen that they find their completion in a Good which is Eternal.

[1] Here I agree with Siebeck, *op. cit.*

III.—THE INDUCTIVE ARGUMENT FOR DESIGN.

By D. H. Macgregor.

I.

In this paper it is proposed to take stock of the results of recent research on the eternal problem of natural design. It is justifiable to do so, since the Gifford Trust has specially fostered the defensive side of the argument, and has drawn into this service the most eminent philosophers and theologians. Some of these writers, notably Prof. Ward, have changed the whole aspect of the discussion by abandoning the inductive grounds on which the design argument so long rested, and by appealing to broad metaphysical theories of the adaptation of nature to thought. Further, the prevalence of what is generally known as the Idealistic method of philosophic reasoning itself places the inductive argument in a less predominant position; for the whole tendency of Idealistic philosophy is optimistic and religious, and if the structure of the universe can be proved spiritual we can take the mechanism on trust. I have given reasons for doubting the cogency of both these lines of argument.[1] It appears to me also that all attempts to extrude the direct evidence of natural facts and processes will fail. If much of this evidence seems to cut two ways, or to be vague and tentative, that is perhaps because no criterion has been applied to distinguish the valid from the invalid. Religious faith, at any rate, cannot rest very securely on the position that, though there are deductive reasons for believing the world to be purposeful, we are practically unable to verify these in the concrete; so that part of the universal design is self-concealment. The inductive argument is inexpugnable; it must still and always stand.

There are three assertions which can be made at the beginning. First, the design argument is not necessarily theological. The question is not of the existence of God, but of the validity of a predicate or category. Design is, like causa-

[1] *International Journal of Ethics*, January, 1906; *Hibbert Journal*, July, 1906.

tion, an aspect of natural events, though it groups these events in a different way. The sole question is whether some events or series of events are such that a purely causal explanation is not adequate, does not exhaust the content of the series. Second, it is idle to personify the forces of Nature themselves. Fifty years ago, Darwin impatiently pointed out that Natural Selection was a metaphor which need deceive nobody. Yet since then all the plausibility of some theological reasoning is based on the personification of Nature. For when Nature is personified, she becomes a person of such majestic stamp as to be at once invested with all the sublimest attributes of power, and rationality, and foresight. Mr. Balfour, for instance, employs this method to write down Naturalism; an authority like M. Janet slips into the same temptation.[1]

Third, and most essential of all, it is quite necessary to exclude from the evidence for design all results which we know to be partially or completely the results of the efforts of finite intelligences. If I make a machine for my own use, it is no evidence of natural design that I can use it. That things are capable of manipulation is implied in the laws of causation; but design rests on the idea that manipulation is not required, the result being brought about without it, either in those cases where we could have done it ourselves, or in those where the vastness or infinite detail of the result denied us the power. Every extension of the evidence for finite endeavour is a bar to teleological reasoning. These two vary inversely.

The marks of causation are uniform and necessary sequence; those of design are contingency and utility. The evidence to look for is that of series of events which converge in useful results, with no known cause for the convergence. So far or as soon as we account causally for the convergence there ceases to be a design argument from these series. Finite endeavour is one of the causes which thus discount a teleological inference.

As a final preface, we must meet the assertion that by our definition there can be no teleological evidence at all in nature, since all natural facts are causally connected with each other, in one broad network of relations, which allows of no contingency or accident. Such a reply would misunderstand the position. It is granted that this causal interconnexion exists everywhere; only it does not exhaust the content of some series of events. Let us take two events, A and B, and call the whole natural system X. Then A and B are

[1] *Foundations of Belief*, seventh ed., pp. 70, 79; *Final Causes*, p. 193.

fully explained causally by (X-A) and (X-B). But there is coincidence if the reference to X is superfluous, so that A and B explain each other. A is not a complete causal explanation of B, nor B of A; yet they make subordinate the mediation of X, and stand directly related to each other. These are the coincidences on which the design argument rests. The causal explanation is not adequate to the entire series of events and relations that is given. A general objection to teleological evidence cannot therefore be maintained.

II.

When, with these provisos, we turn to the inductive argument for design, we find a dilemma. The evidence is greatest in amount where it is least convincing; and where it would be most convincing it scarcely exists at all.

Where ought we to look for the strongest evidence of natural design? Not, it is clear, to results brought about by human creation; these have already their adequate causal explanation. Further, it is clear that instances drawn from beyond the human sphere will be more cogent in proportion as they are farther removed from this domain of conscious agency. The nearer they stand to this domain the less certain we can be that they are not adequately explained by finite volition, clear or dim. Throughout the whole organic world, however, the factors of pleasure, pain, and volition are operative on a continuous gradation of planes of intelligence. The tendency of organisms to seek pleasure and avoid pain, their powers of association and recollection, give us strict causal explanations of a multitude of biological results, so that no further cause need be invoked. We ought to look to the inorganic world for the strongest teleological evidence. Here at any rate we are sure that conscious agency is eliminated, and if there are adaptations realised here, which are useful in a high degree, we are strongly placed for the assertion that purpose is a feature of the natural universe, no less than causation and reciprocity.

But as soon as we glance at the inductive case for design, we find that the tendency is to draw the evidence almost exclusively from the biological sphere. We hear no more of the litho-theologies, helio-theologies, and hydato-theologies of mediæval speculation. And if we take our evidence from the conduct and structure of living things, which to some extent can guide their own activities, and create their own pleasurable results, we cut the ground away from the design argument, whatever else we substitute for it. This dilemma

is rendered the more acute because the biological sphere is that in which the rival hypothesis of evolution holds good, explaining by sentient and quasi-volitional forces the growth and mutual adaptations of organisms to organisms or to the environment. From the sphere where his evidence is less open to challenge, where his principle ought to apply with at least as much force as anywhere, the teleologist brings no evidence, and he comes into court with a prejudiced case.

It is not difficult to substantiate the fact that it is on the organic world that induction now relies. Such a book as M. Janet's discussion of Final Causes is full of proof of this. "Let the problem," he says, "be well understood. On the one hand, the final cause is incontestably manifested in the psychological sphere; the question is whether it is manifested lower down. On the other hand, the mechanical cause is evidently manifested (at least, as far as appears) in the inorganic sphere; the question is whether this kind of cause suffices higher up. Between the psychological and the inorganic domains extends the domain of the living organism—that is the tourney-ground of the two causalities, the two methods of explanation."[1] It is this "middle space" he elsewhere asserts to be "the object of debate".

To take another authority. "Even if," writes Sir George Stokes (and the concessive form may be remarked), "the evidence of design in the adaptation of inanimate environment to the wants of future living beings were deemed to have failed altogether, there still remains the consideration of the adaptation of living things to their environment supposed given. To my own mind, it is in living things, especially animals, that the evidence of design is the strongest. And the higher we ascend in the scale, the stronger it becomes."[2]

For the sake of teleology, the converse had better have been true—that the evidence is stronger as we go lower down. The instinct of the bee is a better instance than that of the ape, since there is less reason to suppose the creature's own intelligence to be a sufficient explanation of its skill. But here again it is enough to note the tendency to limit evidence to the organic.

Mr. Balfour, again, writes as follows: "Natural Theology dwells principally upon the numberless examples of adaptation in the organic world, which apparently display the most marvellous indications of ingenious contrivance and the

[1] *Final Causes*, p. 177. [2] *Gifford Lectures*, first series, p. 39.

nicest adjustments of means to ends. From facts like these, it is inferred that Nature has an intelligent and powerful creator." [1]

And, very recently, one of the much-debated instances which seemed to extend the notion of finality into the inorganic world—the formation of the crystal—has been given away by Lord Kelvin, in a remarkable letter. Let us note the deliberate stroke of the pen by which he deletes the inorganic from the evidence for theism. Writing to the *Times* in May, 1903, he says :—

"In your report of a few words which I said in proposing a vote of thanks to Professor Henslow for his lecture 'On Present Day Rationalism' yesterday evening, in University College, I find the following: 'Was there anything so absurd as to believe that a number of atoms by falling together of their own accord could make a crystal, a sprig of moss, a microbe, a living animal?' I wish to delete 'a crystal,' though no doubt your report of what I said is correct. Exceedingly narrow limits of time prevented me from endeavouring to explain how different is the structure of a crystal from that of any portion, large or small, of an animal or plant, or the cellular formation of which the bodies of animals and plants are made; but I desired to point out that, while 'fortuitous concourse of atoms' is not an inappropriate description of the formation of a crystal, it is utterly absurd in respect to the coming into existence, or the growth, or the continuation of the molecular combinations presented in the bodies of living things. Here scientific thought is compelled to accept the idea of Creative Power."

These statements are sufficiently typical, as any one may see who reads M. Janet's classical study of *Final Causes*. There is nothing inherently wrong in the method of the inductive argument for design: the confession of weakness is in the nature of the evidence adduced. Two steps can be taken to remedy the defect, and restore their evidential value to the "choir of heaven and furniture of earth". Research may extend the evidence by demonstrating the utility of inorganic adaptations; or the rival theory of evolution may be combated. Waiving the former, let us consider for a moment how it stands with the latter policy. Two lines may be followed. The validity of Darwin's principles may be challenged, or it may be claimed that they imply purposive factors which render Evolution itself a teleological process.

[1] *Foundations*, p. 176.

III.

It is difficult to find among modern philosophers a clear statement of how they regard Darwin's theory. Sometimes arguments are employed which clearly ought to put Darwin out of court; for instance, there is the general theory that any evolution of the intelligent from the unintelligent is absurd, since the statement of the process itself "implies intelligence". Or, again, it appears to be held by Prof. Seth that any evolution of the higher from the lower—which appears to mean any evolution at all—is not possible.[1] On the other hand, the standpoint of evolution is just as often implicitly accepted, and Prof. Ward seems content to take the second method of discussing it. While men of science have enthusiastically accepted and expanded Darwin's reasoning, it is scarcely possible to say what speculative thinkers make of its results. We still await an explicit verdict.

Darwin left it open to his critics to take two positions of attack, both of which would still be well chosen. In the first place, similarities of type must be admitted to exist between organisms, such that it is a legitimate speculation to inquire what is common in these structures, and how the common element is related to the variations. Yet it is possible to object that a logical relation of similarity amid a number of variations cannot at once be translated into an order of development in time. The right to take this step must depend on more than the similarities themselves; these only indicate analogies, but analogies do not always mean common origin. Like the theory of creation, that of common ancestry is a possible descriptive hypothesis; either will fit the existing facts. Lower and higher, decadent and progressive, structures give to the biological system a continuity which is certainly translatable into terms of historical evolution, but which *need not* be carried beyond a purely static gradation of forms. It has often been asked —Who has seen Natural Selection at work changing the type? And Darwin, as we know, answered this question by drawing on indefinite time, a reply which is no solution. I think that on this preliminary ground a demurrer could still be maintained.

The second position of attack which Darwin left open has reference to his factor of variation. He insisted that no

[1] *Man's Place in the Cosmos*, Essays I. and II. especially, pp. 15-17: "All explanation of the higher by the lower is philosophically a hysteron-proteron"

theory could explain this factor. It is haphazard and unaccountable. A variation is not due to Natural Selection, which can only get to work on given varieties. "A variety when once formed must again perhaps after a long interval of time, vary or present individual differences of the same favourable nature as before; and these must be again preserved, and so onwards step by step." We are quite ignorant, he insists, of the causes of variations. They occur, and competition fastens on them. Now evolution is merely progressive variation; and clearly a theory of evolution is severely taxed if it must simply assume variation. It becomes, to a great extent, the statement of a series of changes of which we can only say that they occurred, and were by competition maintained. A theory of the *growth* of species might well enough assume origins and dwell on development; but Darwin deals with the origin of species. We have a process which lacks necessity and continuity, and which concealed this fact by the claim that time was infinite enough for all the possibilities to have come about. And Darwin admits this. "I believe," he says, "in no law of necessary development."[1] This is an enormous, but quite a necessary admission. We translate a similarity of forms into a temporal order, by supposing that variations happened and endured; that others subsequently happened, coincided with the former, and also endured, and so forth!

It can be replied that we can easily parallel this conception of development in cases where variation is equally accidental. Thus if a man goes to the Bar, his becoming Lord Chancellor depends on the chance of his first brief, *plus* the chance that he won his case, *plus* the chance that note was taken of his success, *plus* the chance that another brief followed before the last success was forgotten, *plus* the chance that he won the second case, and so forth. These chances are the explanation, to a great extent, of his final position; there is no "necessary development" here either. But this eludes the point, chiefly because it deals with individuals not with types. If a new society of lawyers were founded, a Lord Chancellor and Crown Counsel would be appointed straight off, who might never have 'evolved'. And our question is precisely whether the theory of historical development is complete enough to entitle us to translate similarities and variations into a time-order at all.

Darwin himself sometimes spoke of "Laws of Variation," and his successors have in various ways sought to rationalise

[1] *Origin of Species*, ch. iv.-v.

this factor.[1] But in both Darwin and Wallace this is a loose use of the term "Law," and it refers to a mere statement of the fact that variation occurs. Lamarck went further, and the tendency is now to make variation itself a product of selection, as the fleetness of a beast of prey is explained by the fleetness of the prey. A great deal of work is still being done on biological variation, and it is likely that this flaw in Darwin's hypothesis will be made good.

And even if the "natural theologian" could maintain the attack on such grounds as these, it would profit him little to cast doubt on Evolution. The overthrow of this theory would not leave the design hypothesis master of the field. So long as the evidence is limited to organisms, which can guide their own actions by recollection and association of pleasures and pains, it will not be a contingent but a necessary result that there are pleasurable adaptations on the whole. Many theological attacks on Evolution assume that more is to be gained for theology by its fall than would actually be the case.

IV.

Nor is the outlook more hopeful if the method is adopted of seeking to prove Evolution itself a teleological process, in that the selfish endeavours of organic beings lead without foresight to fortunate results on a wide scale.

There is a consensus of authorities for the opinion that Evolution cannot be as a whole regarded as a progress toward what is better. The very phrase "survival of the fittest," which seems to have an optimistic ring about it, is deprived of this significance by parties on both sides. Huxley, indeed, describes it downright as "the fallacy of the fittest".

"Fittest," he says, in his Romanes Lecture, "has a connotation of best; and about best there hangs a moral flavour. In cosmic nature, however, what is fittest depends upon the conditions. Long since, I ventured to point out that, if our hemisphere were to cool again, the survival of the fittest might bring about, in the vegetable kingdom, a population of more and more stunted and humbler organisms, until the 'fittest' that survived might be nothing but lichens, diatoms, and such microscopic organisms as those which give red snow its colour; while, if it became hotter, the pleasant

[1] Wallace, *Darwinism*, ch. i.

valleys of the Thames and Isis might be uninhabitable by any animated beings save those that flourish in a tropical jungle. They, as the fittest, the best adapted to the changed conditions, would survive."

This conclusion has been endorsed by Mr. Spencer. "The law is not the survival of the 'better' or the 'stronger' if we give to these words anything like their ordinary meanings. It is the survival of those which are constitutionally fittest to thrive under the conditions in which they are placed; and very often that which, humanly speaking, is inferiority, causes the survival." [1]

In Darwin's principles alone, Prof. Ward writes, "there is nothing teleological: neither struggle for life, nor selection by nature, nor survival of the fittest, but simply conservation of the stablest". [2]

We have no guarantee, it would therefore seem, that Evolution is a tendency toward a greater good. It is void of moral significance altogether. Whatever is, is good, whether the process were to face the other way or not; and we have no warrant that it will continue on its present lines of development.

I think that this gives away too much. It is in a sense true to say that the survival of the fittest is only the survival of that which survives. But in the same way it would be a truism that the market price of an article is that at which the quantity bought is equal to the quantity sold. These, however, are truisms because they take no account of the nature of the competition, but state only the fact that competition tends to equilibrium. The Economic idea must take note of the positive factor of utility in the thing bought and of sacrifice in the thing sold; and then it is no longer a truism but a statement about human nature—that no one makes a sacrifice (in the business world) without an equivalent reward. And if we fill up the content of biological evolution in the same way we see that what survives is that which takes pleasure in such acts as conserve its being, and finds pain in such as destroy it. Those organisms which remain are not merely such as are there *de facto*, but those which have on the whole a pleasanter or less painful existence than any others which were possible. Even if the sentient world gave way altogether to the lower organisms, that would at least be better than its survival in perpetual pain. And as pleasure-pain is the main content of the

[1] *Essays*, vol. i., *cf.* A. Seth, *Man's Place*, etc., p. 16.
[2] Vol. i., p. 275.

good from the biological standpoint, Evolution cannot be dismissed as utterly a non-moral process.

Still, this result is unsatisfactory. For we can only speak in negatives. We cannot say that the sum of pleasure tends to increase from generation to generation, but only that there is less pain than would have been otherwise. The sum of pleasure might be diminishing, and we should have the cold comfort of reflecting that possibly it might be diminishing faster than is the case. Can we base any kind of optimism on considerations of what might have been, but is not? or on evil which might have been greater, but is not? It is very doubtful if any one would accept a teleological argument based upon negatives. If organic life ceased altogether, and material forces had their own way universally, it would be absurd to regard this as teleological, because there was no pain. In the general sense of the word, therefore, Evolution cannot be regarded as itself purposeful.

V.

Since even the indication of flaws in the argument of Evolution would not leave the design argument in a much stronger position so far as the evidence of the organic world is concerned; and since there appears no tendency to find evidence in the more convincing inorganic sphere, for both these reasons, the form of the inductive argument for design has changed, so as to give quite a new meaning to the conclusion that it is sought to establish.

The most recent form of deductive reasoning on this subject was that in which it was indicated that, letting alone the wheels within wheels, there remained the broad fact that the laws of nature were adapted to the constitution of man, being uniform so that he could think them, and manipulate for his own ends chains of causes and effects. This is teleology in its very widest aspect. And, corresponding to this deductive argument, the inductive argument has proceeded to show that particular organisms (for its evidence remains organic) strive on their own behalf to realise their own good and that of their kind; so that there is more than mechanism, there is 'anabolic' process or continual subjective endeavour toward improvement, in the biological world, which therefore is throughout purposive.[1]

It is legitimate that the argument should in this way change its form, provided the change is noted, and it is under-

[1] *Naturalism and Agnosticism*, vol. i.

stood that 'purpose' is being given a new meaning. We are now referring to a number of purposes, not to a general purposiveness; to finite endeavours, not to arrangements which dispense with the necessity for endeavour. In short, this is the substitution of an ethical and subjective for an objective and metaphysical form of design.

Many of the historical abuses of the design argument are nothing but the confusion of these two different things. If a thing is created by finite beings for themselves, the further hypothesis of a foreordained arrangement is superfluous and often ridiculous.

For example, Chrysippus took as evidence of Divine providence the fitness of the ox for ploughing, of the horse to ride on, of the dog for hunting. Epictetus tried to show that the ass was fore-ordained to bear burdens. Fénélon asserted that water was created "in order to sustain those immense floating edifices which are called vessels. The ocean which seems placed between the continents to divide them for ever is, on the contrary, the meeting place of all nations"—an argument similar to that of Izaak Walton, who pointed out that the sea alone enabled us to sail to Venice and see the pictures. According to B. St. Pierre, "dogs are usually of two opposite colours, one dark and the other light, in order that wherever they may be in the house they may be distinguished from the furniture". The literature of Stoicism is full of such arguments, as is also that of the Schoolmen.

How Voltaire made merry over them is well known. Was the nose, he asked, made to carry spectacles, or the cork-tree to cork bottles?

What Prof. Ward calls 'teleology within the range of biological ideas' is a new conception of the inductive argument for design, and yields a totally different conclusion as to the nature of the world. Its strength varies inversely with that of the objective design argument of the "natural theologians"; it lessens the need for the hypothesis of Providence.

But it may well be claimed that by this change of form the inductive argument is made more and not less valuable; that causation is of greater worth than fore-ordination. This seems to me true, provided that one thing can be proved—that all these finite purposes work together, so that they are added, and do not cancel each other in the result. This cannot be proved inductively. It requires some sort of deductive proof of the unity of the world. It must be shown that individuation has some counterpart of integration.

VI.

Lotze is the only philosopher who ever tried to prove the unity of the whole world, spite of the self-distinction which gives each individual its own degree of independence. His argument is classic, and is as follows.

He takes it for granted that the internal modification of a thing by its own organic processes is conceivable, since we are here dealing with continuous changes. But when we ask how one thing can influence another thing, we cannot represent to ourselves the process implied, and so we are driven to conclude that there is no such thing as "transeunt action," and that all apparent interactions are but modifications of one all-including reality.

Here is the proof that the interaction of independent things is inconceivable. When a body A acts on a body B, we must suppose, if these are independent of each other, that some state E passes over from A to B. "But, granting that E could separate itself from A, what gave it its direction at the particular moment to B, rather than to C? If we assume that A has given it this direction, we presuppose the same process of causative action as taking place between A and E for which we have not yet found an intelligible account as taking place between A and B. Nor is this all. Since it will not be merely on B and C, but presumably on many other Beings that A will put forth its activity, we shall have to ask the further question what it is that at a given moment determines A to impart to E the direction towards B and not towards C, or towards C and not towards B?

"Finally it is important to realise how completely impossible is the innocent assumption that the transferred E will all of a sudden become a state of B, when once it has completed its journey to B. Had this homeless state once arrived at the metaphysical place which B occupies, it would indeed be there, but what would follow from that? Not even that it would remain there. It might continue its mysterious journey to infinity, and, as it was once a no-man's state, so remain. For the mere purpose of keeping it in its course, we must make the yet further supposition of an arresting action of B upon it. And given this singular notion, it would still be a long way to the consequence that E, being an independent state, not belonging to anything in particular, should not only somehow attach itself to the equally independent being B, but should become a state of this B itself, an affection or change of B. These accu-

mulated difficulties make it clear that the coming to pass of a causative action can never be explained by the transfer of any influence."[1]

Now if space were considered real, the impossibility of conceiving such processes as detachment, direction, and attachment, would certainly tell against the argument for independent things. But in the beginning of his second book, Lotze cuts the ground clean away from this position of his by arguing that space is not real, but only phenomenal; a form of the mind, not an aspect of things. He proves this by a very closely reasoned metaphysical discussion, which aims at showing how impossible it is to conceive space as belonging to reality itself. But if this is so the argument against independent reals, so far as based on the inconceivability of transeunt action, disappears; for it is no argument against a theory of reality that it renders impossible a process in a medium which is not real.

VII.

The more the inductive argument for design takes the method of demonstrating finite purposiveness, the more it will become dependent on some valid proof of the unity of the world. Otherwise it is clear that the tendency is to disintegrate the conception of teleology, and substitute the conception of strife. Most proofs of the unity of the world have failed, like that of Lotze, because by an inveterate habit of philosophic thought, it is constantly assumed that the only true notion of unity is that of comprehensiveness, or interpenetration of parts, or interfusion. The result is that at once we have space metaphors and the paradoxes of continuity. There is no need to create these difficulties, which beset nearly every form of Pantheism.

Unity can be represented in other ways, which do not confuse thinking with pictorial imagination. Thus a mathematical formula represents a unity, a relation which is valid for a large number of individual cases, a law which they obey. It is a more valuable idea of the unity of the world to consider that what is sought for is some "expression for" the joint activities of individuals, not some receptacle which literally includes the individuals. Lotze went some way in this line of reasoning, though he continually lapses into the space metaphor. The notion of the unity of the world, in which individual purposes are allowed for and related to each other, seems to be best represented in a formula which

[1] *Metaphysics*, § 56.

is dynamic as well as static. To pretend to entertain the idea of "getting an expression" for the meaning of the world is to lay oneself open to ridicule. My point is that this is a better *method* of representing the unity of a world of purposeful individuals than the method of showing that they are not individuals at all, but parts of some sort of continuum. These reflexions are led up to by the modern change of face in the design argument.

IV.—PROFESSOR BAILLIE'S 'IDEALISTIC CONSTRUCTION OF EXPERIENCE'.[1]

By R. F. Alfred Hoernlé.

The attitude of present-day thinkers towards Hegel may well be described by saying, that they regard him as an awe-inspiring colossus but still a colossus with feet of clay. Even those who call him master have been amongst his most unsparing critics. No one has accepted his system in all its details, but yet the diluted 'Hegelianism,' born of selection and compromise, which forms the substance of so much of modern thought, stands convicted of ineradicable difficulties, both by the arguments of its opponents and by the admissions of its own candid friends. This being so, the strategic movement known as a '*concentration en arrière*' was bound to suggest itself. Might not the weakness of modern Idealism be due to its having fallen away from Hegel? Might its salvation not be found in recanting heresy and doubt? Might a whole-hearted 'return to Hegel' not be the best defence against the onslaughts of hostile critics and the more insidious grumblings of the malcontents in its own camp? From this point of view we shall appreciate the importance of Prof. Baillie's book. Its author is, in many respects, the most 'orthodox' of present-day Hegelians. He acknowledges himself his indebtedness to Hegel's *Phenomenology of Mind*, and for many of his views he might claim the authority of Hegel's great name. This will justify an examination of some of the doctrines of this most recent restatement of Idealism.

The first point that will strike an impartial reader is that Prof. Baillie has hardly done the best that he could have done for Hegel. In the first place, the book impresses one as curiously out of touch with modern thought. There is indeed in ch. i. an attempt to deal with Pragmatism by admitting the *purposiveness* of experience on which it insists, whilst denying the applications which it makes of this con-

[1] *An Outline of the Idealistic Construction of Experience*. By J. B. Baillie. London: Macmillan & Co., 1906. Pp. xi., 544. Price 8s. 6d.

ception. But though the recognition of 'purposiveness' is emphatic enough at the time, it turns out to be, in reality, very perfunctory and barren. For in the rest of the book no further use is made of the conception; the purposiveness of experience drops completely out of sight, and, in fact, the mention of it in ch. i. reads like an isolated after-thought.

Again, there is almost no reference to the critical work that has been done on Hegel's philosophy since Hegel's time. Yet many points, which have been fiercely debated, are here simply reaffirmed without any fresh defence, without an attempt to meet the critics with counter-criticism.[1] Prof. Baillie may be right in asking us to go straight back to the Hegel of the Phenomenology, but surely he cannot expect that we should forget, as we turn back, all the philosophical work that has been done since 1806. We cannot at this time of day accept without question an Idealistic Construction of Experience making practically no reference, *e.g.*, to Mr. Bradley's Absolutism, which on the one hand owes so much to Hegel, and yet on the other challenges some of Hegel's most essential doctrines so forcibly. And has Prof. Baillie wholly forgotten the criticisms which he himself urged in the last chapter of his *Hegel's Logic?* I recall, *e.g.*, an eloquent argument against the identification of Absolute Experience with Reality, because that would break down the distinction 'between a process of knowledge and the course of events' and thus make the position 'indistinguishable from pure subjectivism'.[2] The present book throughout assumes the identity of Absolute Experience and Reality. Do the difficulties, which Prof. Baillie once saw in this doctrine, still exist? Then why does he pass by such a crucial point in silence, and leave the anxious reader in sore perplexity? Or if his doubts have vanished, why not communicate to others the sources of his illumination?

Further, the book might have been made far more convincing, if the validity of the principles which it defends had been brought out by more frequent illustration from modern problems. Thus in discussing the development of self-consciousness, Prof. Baillie makes full use of Hegel's famous illustration from the relation of master and slave, and refers merely in a footnote to the modern 'Labour-problem' as a parallel instance. How much more interesting would it have been, had we found Hegel's illustration in the footnote, and the development of self-consciousness in the Labour-

[1] The only philosopher who comes in for constant criticism (not all of it deserved) is that *bête noire* of all Hegelians, the unfortunate Kant.

[2] *Hegel's Logic*, p. 355.

problem worked out in the text. It would have been the surest way of bringing the truth of Hegelianism home to a modern reader. As it is, a certain air of unreality hangs about the discussion, which is not dispelled by the emphasis that many passages borrow from an all too liberal use of Italics.[1]

None of these defects, perhaps, are very serious, and they may be inevitable in a mere 'Outline'. But that merely shows that an 'Outline' is after all not enough to re-establish Hegel or 'to do over again' seriously the work of the great Idealists. One could have wished that Prof. Baillie had attempted the task on a larger scale, and given us a re-interpretation of Hegel unfettered by the creaking armour of Hegel's bizarre technicalities. We may hope that he will do so yet. Assuredly, the attempt would be welcomed.

However, we must now turn to a more detailed examination of the construction of experience which we are offered. Among the various approaches to the fundamental conception of an Absolute Experience that at the beginning of ch. ii. is perhaps the most illuminating. Knowledge is an activity and has an end, we are told; it is a process with an ideal; but the ideal is not merely something beyond and not yet realised; rather it is the actual moving-power in the process, it is what is realising itself in the process. We can understand experience only with reference to this *immanent* ideal, which manifests itself in that always and everywhere we strive to make our experience self-complete and harmonious. The ways in which we try to achieve this end differ, so we may put it, according to the materials in which, in each case, we have to realise unity. Hence the different forms and kinds of experience from sense-perception to science, morality and religion. Each has its truth, each its objectivity, each under its own special conditions is a way of realising the ideal which is at work in all. And this ideal is a single, absolute, individual experience.

To understand this better it is necessary to bear in mind that knowledge or experience, both as a whole and in any one of its forms, is not (in Prof. Baillie's phraseology) an 'adjective' of the mind or an event in the mind in contrast with a world outside, but that it is the very 'substance' of the mind, its very life and being, its most concrete form of existence.[2]

[1] This is, I believe, a mannerism which Prof. Baillie has learnt from Hegel.

[2] For this use of the phrases 'adjective' and 'substance' see, *e.g.*, pp. 275, 276.

That this point of view has great advantages is undeniable. The flank of all Dualism and all Subjectivism is turned at once if we refuse to start our reflexions on experience with the distinction of knowledge and its object, and, on the contrary, base ourselves on the ultimate fact that experience, defined in the most general way, means *awareness of something*, and therefore implies from the very first objective existence. If we grant this basis, the task of the philosopher consists in distinguishing the various forms of our 'awareness of something' according to the degree in which diversity of content is reduced in each to the greatest possible unity. And more. We do not merely get *different* forms, each constituting a cosmos or sphere of its own, with its own peculiar facts and categories (such as, *e.g.*, science and morality), but we can arrange these forms in a scale of value, treat them as respectively higher and lower levels or 'planes' of experience. In short, each level of experience is defined by its objective content, and the objective content is defined by the characteristic *category* which we employ in each case to give unity to the multiplicity of details which confronts us at that level. And one level is higher as against another, if its category includes the category of the other as a 'moment' in itself. Thus, *e.g.*, Perception as a plane of experience is characterised by the category of 'Thing' which brings unity into the diversity of qualities; whereas at the level of Understanding we have the category of 'Force' of which the many 'Things' are the 'expressions'. And thus we advance upwards to the category of Self,[1] first as opposed to its Other and then as identified with it, until we reach the level of experience where we deliberately and consciously take up 'the point of view of the whole,' *i.e.*, work with the category of the Absolute. Here we have the completest unity in the completest diversity, for in so far as the individual self takes up the point of view of the whole it identifies itself with the whole and thereby with everything which, besides itself, is contained in the whole.

Another advantage gained by approaching the problem of experience in this way is that we do not confine ourselves to the perception of the external world or to science, but embrace within our survey every form of *spiritual* experience as well. Prof. Baillie rightly points out that to treat external perception as if it alone offered difficulties to epistemology is absurd, and that the 'truth,' *e.g.*, of religion deserves to be discussed no less than the 'truth' of science. What, in spite of all its

[1] Cp. esp. p. 213.

difficulties, gives to Hegelian Idealism its vitality and attraction is undoubtedly just this claim to deal with the self-conscious and spiritual modes of experience, and indeed to find in them the principle for the interpretation of the lower planes. And whoever raises the question of the 'truth' of our moral or religious experience will at once discover the inadequacy of dualistic assumptions. For how the distinction, so commonly and so glibly made, between our 'ideas' and the real facts over against them is to help us here, is far from clear. If insisted on, it can only lead to treating the language of spiritual experience as metaphor—inspiring or inane according to the critic's taste—and its objects as 'illusions' and 'superstitions'.

However, granting the advantages of the Hegelian position so far, it is clear that it is also beset by a number of difficulties, some of which are worth discussing.

In the first place, there is a difficulty about the word 'experience,' which has associations that make us 'shy' at the statement that reality is a single, all-inclusive experience. It is not the *unity* of the world, asserted in this statement, which is difficult. We are quite accustomed to regard ourselves and all other beings as making up one total self-contained universe. Nor do we shrink from trying to determine the nature and substance of this universe; we have called it matter; we have called it spirit; we have called it God. But we find it hard to call it experience. For that seems to involve not merely the assertion that we can have true knowledge of the nature of the Absolute, but also that the Absolute is just our knowledge of it, and even—self-consciousness being the highest form of experience—that our knowledge of the Absolute is the Absolute's knowledge of itself. All this seems to be involved in the harmless-looking statement that 'we can take up the point of view of the whole'. That is a statement with which fewer philosophers would be inclined to quarrel, if it were not asserted that, in admitting it, they had also admitted what to them is unintelligible. I have praised Idealism above for including the truth of spiritual experience in its survey, but I cannot follow when an attempt is made to squeeze out of these experiences metaphysical assertions which they do not seem to contain. Let us argue the question first as it arises in the religious experience. In religion, so Prof. Baillie tells us, '*we are at the point of view of the whole as such*, and think in terms of it'.[1] This is explained in the chapter on religion: 'The *point of view* of the

[1] P. 26. Italics by Prof. Baillie.

Absolute Reality is deliberately and consciously *adopted* as an attitude of experience. In Religion man places himself at the point of view of God's spirit and looks, thinks, feels, and acts in the "sight" or in the "light" of it.'[1] Further, to be at the point of view of God is not to be God: 'we must not suppose that in Religion the finite mind suddenly *becomes* God. To be one with God consciously, to take up the position of Absolute Spirit is possible without man being God,' etc.[2] All this is moderate and indeed obvious enough. To deny it would be to deny that men can feel themselves to be at one with God, can identify their will with his will, can bring their lives, both in what they do and in what they suffer, under the conception 'thy will be done'. But this is intelligible because so far we have been describing the religious experience from the side of individual men who 'have religion,' who 'take up the point of view' of God. If that were all, who would object? But the point is just that for the Hegelian idealist it is *not* all. He does not merely assert that men are conscious of God, or even that God is conscious of himself, but *that God is conscious of himself in men's consciousness of him.* Nothing less will do for him.[3] Let us listen to Prof. Baillie: Spirit must not be merely an *object for* conscious individuals. 'Being self-conscious, it must be, as a whole, and in its completeness, conscious of its *own* self. . . . This complete self-consciousness of Spirit, its being Spirit *in* and *to* itself as a unity, is only found in its proper form in the *Religious Life.*'[4] And the real meaning of 'being at the point of view' of Absolute Spirit is presently explained to be: 'In religion . . . *we are at the point of view of* Absolute Spirit, conscious of what it is *for itself*, conscious of how its *own* self-consciousness proceeds'.[5] I confess I fail to see

[1] P. 314. [2] P. 316.

[3] In his previous book (*Hegel's Logic*, p. 333) Prof. Baillie also points out, that for Hegel the highest mode of experience is 'not our knowledge of Absolute Truth, but the Absolute's knowledge of itself'. What has become of the difficulties which Prof. Baillie then saw in this view?

[4] Pp. 311-312. Prof. Baillie presently adds that in the religious life we have 'the absolute Reality conscious of itself *as such* and operating *as such*; independent of individual consciousness'. One would like to know what is meant by 'independence' in this context. And are we not told that man, not God, is the religious being (p. 316)? It is then presumably man who leads the 'religious life'. In short, there is no way that I can see of torturing the statement that man has experience of God into the statement that this is God's experience of himself.

[5] P. 320. Italics (as always) by Prof. Baillie. A still more characteristic passage is found on p. 322: 'Religion is the consciousness of the Life of God in man's experience. God is Absolute Spirit and is conscious of Himself as Spirit, and is conscious of Himself in Spirit. The ways in which He is conscious of Himself constitute and form the types of Religion.'

what difference has remained between being at the point of view of God and being God, if I can truly be said to be conscious of the way in which God is conscious of himself. And this way of putting it becomes positively grotesque when we think of some of the historical types of religion. Prof. Baillie wisely refuses to discuss these: 'we are not discussing these "religions". We are discussing Religion *as such*, Religion as an attitude of experience.'[1] This statement must be rightly understood. Most readers will at first tend to take it as meaning that under the heading 'religion *as such*' Prof. Baillie is discussing the *generic* or typical character of religion, the character which we expect to find realised in *every* form of religion, wherever and whenever it may be found. They will, perhaps, point triumphantly to the crude and brutal religion of some savage and ask, how the savage can be said to be '*at the point of view of* the Absolute Spirit, conscious of what it is *for itself;* conscious of how its *own* self-consciousness proceeds,' or how in the savage's religion God can be said to be 'conscious of Himself'. But this criticism would not quite hit the point. For Religion-as-such is not the character which all religions have in common. Rather, all historical religions are 'moments' or 'phases' of Religion-as-such. They are the forms in which the Absolute Spirit realises itself under the conditions of each level or plane of experience, and all historical religions *together* (so one might put it) make up the life of Religion-as-such. This, no doubt, gets rid of the above difficulty, but does it not raise a crop of fresh ones? Prof. Baillie claims to be able to show the *necessity* of each 'moment' (*i.e.*, each historical religion) as a content of the Absolute Spirit. But history is not at an end yet; new religions may be invented. What of their necessity? Again: it may be true to say of Religion-as-such (including, as above defined, all historical religions as its moments) that in it we are 'at the point of view' of Absolute Spirit. But then Religion-as-such is no one's actual religion; historical men have some historical form of religion, and of these, as we have seen, it is absurd to say that they represent 'the point of view of the Absolute Spirit as it is *for* and *to* itself'. Or again, if we admit that even the savage's religion is, in its way, a consciousness of God, and therefore a form of God's consciousness of Himself, yet we cannot but regard this form of religious experience as defective and shot through with error. But then we have on our hands the puzzle that even such imperfect manifestations are somehow necessary

[1] P. 321.

to the life of the Absolute Spirit. This difficulty takes us deep into the question of the coherence of the whole Hegelian 'construction' of experience. And there is another difficulty, which similarly touches on the structure of the system. All 'modes,' 'levels,' 'planes' of experience are for the Hegelian forms in which the one, single, absolute experience exists and realises itself. One of these modes or planes, so we had been told at the beginning, is religion, where we are at the point of view of the Absolute. At no lower level, then, are we at this point of view. Yet now it appears that religion itself has its own levels and stages, and that each plane of experience has its own appropriate type of religion. These cross-divisions are surely very puzzling. Religion is both the highest plane[1] and apparently present at all planes. The one assertion is due to a regard for the *logical* value of the categories by which each plane is defined; the other is an attempt at the same time to do justice to *historical* facts. We have here an instance of an ambiguity that runs through the whole Hegelian philosophy, the ambiguity arising out of the fact, that in some historical successions we can trace a logical development. But this ambiguity must receive separate treatment later on.

It is instructive to trace an analogous difficulty in the treatment of Morality. Here, as in the case of religion, certain aspects of our moral experience are rightly and truly insisted on, but interpreted in a way which makes it hard to accept them. The difficulties all turn on the exact meaning to be attached to the phrase 'universal self-consciousness'. The point of the argument is, I take it, directed against extreme individualism. The object is to show that morality and society do imply a common life and a common good, and cannot be accounted for by assuming an aggregate of discrete individuals, each shut up within his own sphere, and not recognising any community of interests between himself and others. So far no wise man will object. Nor will he object, when he is told that his 'conscience' is 'either implicitly or explicitly universal, *i.e.*, contains something which others hold good and respect. It is not a principle of distinguishing one individual spiritual life from that of others. It is a principle of deeper *union* between individual spirits. If its content is universal, it must be because others either can or ought to share in it.'[2] And again: 'a universal self is a self

[1] That is, omitting philosophy which also is at the point of view of the Absolute. Its relation to Religion, by the way, is left undefined in this book. Prof. Baillie merely gives a reference to his *Hegel's Logic*.

[2] P. 295.

including "others"'.[1] In this sense we may say of individual spirits that they find their self-completion in the moral life, the life which they lead as members of a social whole. And in so far as each of us accepts his position in the social whole (identifies himself with his 'station and its duties'—a phrase not used by Prof. Baillie) we may even agree that 'I am *I* (universal) through a universal self which I am conscious of as one with *me*, but which is wider than "me"'.[2] All this we may accept as true and even obvious. But the question is: Having admitted so much are we bound also to admit that therefore the whole, of which we as self-conscious individuals are members, is itself a universal self-consciousness, or, more strictly, a 'Universal Self-conscious Individuality'? Personally, I fail to perform this astonishing leap. The more so, as it seems to imply not merely that Morality (alias any kind of social whole, which are all 'moments' of morality) is a self-consciousness, but is conscious of itself in our consciousness of it or, rather, in our consciousness of ourselves as one with it! Yet this is, surely, the meaning of such passages as these: Social life is '*literally the activity of a social, of a universal self-consciousness*';[3] 'Morality is the self-differentiation of a universal self-consciousness into specific individualities';[4] and to give the central passage: the moral life involves two opposed or contrasted factors. 'These are the life of the universal self-consciousness,—substantial and actual universality; and the life of each moment of it—the distinct individual centres sharing in and living by that universality. The specific individuality has a twofold character by its being conscious of self by self; *one* self is what we have called the substantial universal, the *other* is the determinate limited individuality each possesses, and which makes each distinct from another. The first is the same *for* all and *in* all; the second is restricted to a certain area or sphere of that totality. Similarly, the universal substance "duplicates" *its* self in virtue of its being a *self-conscious* whole, a whole in and through consciousness of self; the one self being the universal self as such, . . . the other the determinate individualities.'[5]

This surely brings out the point at issue quite clearly. The state, *e.g.*, is a self-conscious whole, it is conscious of itself in that its members are conscious of themselves as members of it. But is there any reason to think that a whole, the parts of which are self-conscious individuals, must itself be self-conscious and a self-conscious individuality? There are 'Hegelians' who have denied that there is any such

[1] P. 296. [2] P. 277. [3] P. 278. [4] P. 280. [5] Pp. 286, 287.

reason. Dr. McTaggart, I understand, is one of them. Mr. Bradley would seem to be another, for whilst denying that the Absolute as such is self-conscious, he regards it as manifesting itself in finite spirits, some of which, at any rate, are self-conscious. This very disagreement shows that there is a difficulty here which ought to have been discussed. And we have here an instance of the fatal neglect (to which I drew attention above) on Prof. Baillie's part of modern discussion and criticism of the Hegelian position. To disregard a criticism is not to refute it; and if Hegel's position is to be re-established in its pure form, it must be argued and not merely asserted.

To put the whole point quite shortly: It is one thing to say that many individual consciousnesses have an identical (*i.e.*, universal) content; it is another to say that this content is itself 'a self-consciousness'. We may grant that there is a *union* between self-conscious individuals, and that the individuals are conscious of it, and conscious also that in it they find their true self-realisation. But does it follow that therefore the union itself has the predicate of being a self-consciousness? 'Society, a universal self-consciousness, does exist as an order of self-conscious individual wills,'[1] says Prof. Baillie. But are these two qualifications of society identical? It is an 'order of self-conscious wills,' but is it therefore itself something that can be called a self and said to be conscious of itself? I, *e.g.*, am a subordinate member of a university; I accept my position, and try to do my duty in accordance with it. I recognise the corresponding duties and positions of all other members, and am in turn recognised by them. We are all devoted to our work, we find in it our common life, our common good, our self-realisation; our selves are—if we must use the term—'universal'. And we may further say, that the University exists and is maintained in so far as we work and live as its members. But in all this, have we made one step towards saying that the University is a Self-conscious Individuality, conscious of itself *in* and *through* all its members? In short, I fail to see, how we can treat any kind of social whole (whether state or church or family or club) as 'self-conscious' in the sense in which we treat its individual members as self-conscious. We cannot, that is, ask whether the state is self-conscious in the sense in which we can ask this question about another human being, or even an animal. A self-conscious being is, I take it, a subject which can have experiences. Can we call any kind of social whole a subject in this sense?

[1] P. 285.

In short, all depends on keeping our categories properly distinct, on not running our 'points-of-view' together. The important point, in every case, is *what is the central subject of our predicates*. To take an analogy: force, as Prof. Baillie tells us, is a higher category than 'thing,' though 'thing' is included as a 'moment' in force. This means that when we talk about forces, we are not talking about things, and the predicates which are true of forces are not true of things. Similarly, individuals may be necessary parts of a social whole, but from that it does not follow, that predicates which are true of individuals are therefore true of the social whole of which they are members, or *vice versâ*, that predicates which attach to the social whole attach therefore to its individual members, even though these should be 'included' in the whole. I am not attempting then to deny, *e.g.*, the reality of the *volonté générale*, but I do deny that when we make it the subject of predicates, take its 'point of view,' we can describe it as a self-conscious individuality. On the other hand, when I take the point of view of an individual citizen, and consider his relation to the *volonté générale*, I can describe it as an idea of which he is conscious as being pursued by himself in common with the majority of his fellow-citizens. The position of the *volonté générale* does not seem to me, in its ultimate principle, to be different from the position of a common world, *e.g.*, of perception. In the same sense in which many subjects can perceive a self-same and identical object, in the same sense they can have a self-same and identical object of will. We may, if we choose, call the identical content of many consciousnesses 'universal,' but that leaves wholly open the question as to the detailed nature of this universal content. It may be anything from an object of perception to the highest spiritual reality, but whether it must itself be called a self-conscious individuality is another question. At any rate, it does not follow from its universality.

In this connexion, another point may suitably be discussed about which there hangs to my mind a certain obscurity. I am puzzled as to what experience the Hegelian is talking about. He sometimes speaks about Experience, Knowledge, Consciousness, etc., without any further qualification. This means then, I take it, experience wherever and whenever it may be found. But, on the other hand, the limiting qualification 'human' is often introduced, and we find the philosopher protesting that *human* knowledge and experience are the theme of his discourse. In fact, the whole discussion lapses continually from predications about Experience into

predications about 'us'. It is 'we' who take up the point of view of the whole; it is in 'our' experience that a certain conception is found. Now one would like to be told clearly what the force of the qualification 'human' exactly is. Is it meant to introduce a certain *relativity* into experience? And if so, by contrast with what is this relativity defined? It would be intelligible enough if we contrasted human experience, *e.g.*, with the experience of animals or, perhaps, of angels, but these empirical distinctions seem slightly out of place in a philosophy which professes to interpret Experience as such. Or, maybe, the contrast intended is with Absolute Experience. But any distinction which we may make between 'our' experience and Absolute Experience is after all '*our*' *distinction* and thus we remain within 'human' experience. Or rather, in this universal application, the word 'human' loses all its qualifying and limiting force. The Hegelian might just as well eschew 'human' altogether in talking about experience and, boldly identifying himself with the Absolute, treat all experience as the various modes of the Absolute's self-contemplation. In short, it seems doubtful, whether any kind of *relativity* of knowledge can be accepted or defended by the Hegelian. Hegel himself apparently recognised none. And even such modified relativity as Mr. Bradley defends (*viz.*, that we know by general principles certain characteristics of the ultimate reality, though we do not find these features realised in the details of actual experience) can no longer be maintained. *The distinction 'for us'—'for the Absolute' must go in all its forms;* for the very fact that we can make it shows that we are beyond it. This is, I think, what the true Hegelian must maintain. Whether it is tenable, I doubt very much. But it would clear the air and help philosophical discussion, if this position, supposing it to be seriously held, were more openly and boldly stated, and above all more strenuously and convincingly defended.

I have had in mind in discussing this point, not merely Prof. Baillie's book,[1] but still more Dr. McTaggart's criticism of Hegel's treatment of Evil. Working with the antithesis: in the Absolute Experience there is no evil—in our experience there is evil, Dr. McTaggart constructs the following dilemma: 'Either the evil round us is real, or it is not. If it is real, then reality is not perfectly rational. But if it is absolutely unreal, then all our finite experience—and we

[1] The main passage in Prof. Baillie's book is to be found on p. 118. I have quoted it below in a different connexion (see p. 562).

know of no other—must have an element in it which is absolutely irrational. . . .'[1] I quote this passage merely to illustrate the difficulties into which the Hegelian gets once he admits relativity and the distinction of 'for us'—'for the Absolute' as an ultimate distinction. And Dr. McTaggart's criticism is, I am convinced, what a Hegelian in his choice phraseology would call an 'external' criticism, one not made on the basis of principles admitted by the system. If the true Hegelian makes the distinction at all, 'for us' can only mean: if we argue on the level of any category below the highest. I recollect in this connexion an illuminating passage in the 'Preface' to the *Phenomenology*[2] where Hegel points out how false it is to say that every error has in it a measure of truth and every truth a measure of error. This is to combine them 'like oil and water, unmixed and externally'. He adduces the similar difficulty besetting phrases like 'unity of subject and object,' 'unity of finite and infinite,' etc.—a difficulty arising from the fact, that 'subject,' 'object,' etc., are here used with the meaning which they bear *apart* from their unity, and which therefore is not adequate to their meaning *in* their unity: 'ebenso,' he goes on, 'ist das Falsche nicht mehr als Falsches ein Moment der Wahrheit'. Well, it is not my business to decide whether Hegel is right or his critics; but it is my business to draw attention to the aporia so that future 'idealistic constructions of experience' may grapple with it, and give us argument, not dogma.

As for 'error'—Prof. Baillie admits[3] that it presents a difficulty to his position and requires explanation. And he gives a reference to ch. iv. *en bloc*. But I have searched in vain in that chapter for so much as a mention of error. The reason is that for Prof. Baillie the problem of error 'put more formally' (!) changes into the problem 'by what process shall we criticise and connect these various truths [*viz.*, Art, Science, Religion and other 'planes' of experience] so as to show an inherent necessity running through them all'.[4] This is a highly laudable enterprise, but in what sense the tracing of the necessity running through, *e.g.*, Art and Science is an 'explanation' of error can be clear only to a Hegelian. Is there no error *within* the field of science? Are there no principles of conduct which are morally disastrous? And are the special problems arising out of these not worth discussing in a 'construction' of experience?

The question as to the exact sense in which the experience

[1] *Studies in the Hegelian Dialectic*, p. 187.
[2] *Werke*, ii., p. 31. [3] P. 100. [4] P. 100.

with which we are dealing can be called 'human' arises in a somewhat different form, when we are told that 'experience takes place only in finite centres'. Some such doctrine seems implied in the following passage from Prof. Baillie: 'Experience is . . . realised at once in individual minds and yet in no given individual mind completely. It takes all the diversity of finite mind to experience all that can fall within man's experience. With man's experience as a whole we are alone concerned, for this is the only experience historically realised.'[1] I confess, I cannot make out from this passage whether or not Prof. Baillie means, that experience is found *only in human* minds, and that there are no finite minds at all except historically realised human minds. His words would easily admit of this interpretation, yet (to say nothing, *e.g.*, of the experiences of animals which certainly are 'finite,' but not human) I really can see no valid reason whatever for the assumption, that a certain kind of creatures on this planet are the only possessors of experience. 'Finite mind' or 'finite experience' must surely for the purposes of epistemology (as well as metaphysics) be defined by the peculiar 'finite' character of its *content*, and not by means of the 'historical realisation' of experience in human beings. For finiteness is a logical characteristic and has nothing to do with historical facts. It is to be noticed that Mr. Bradley who holds the view of experience taking place only in finite centres and in the form of finite 'thisness' very strongly[2] nowhere affirms that all finite centres are human.

But even if the principle is stated in this modified form, there is a further difficulty which troubles me, and which I will attempt to formulate at the risk of being told that I have misunderstood everybody. The view that experience is found only in finite centres seems to me to elevate a purely empirical distinction into an ultimate metaphysical fact. I am not, be it observed, attempting to deny the distinction of finite and infinite, but I do wish to question the legitimacy of the phrase 'finite centres'. Above, I said that finiteness was a logical characteristic, which I take to mean that a given experience (or 'plane' of experience) as defined by its content, which in turn is defined by its dominant category, is finite or the reverse, according as the category is finite or the reverse. In that sense, *e.g.*, a world-view based on the category of mechanism is clearly 'finite'. But that, obviously, leaves alone the question in what finite centres—human or otherwise—the idea of mechanism may occur as

[1] P. 118. [2] *App. and Real.* (sec. ed.), p. 226.

a psychological fact. I am merely pleading for consistency. If the Hegelian really professes to 'interpret' Experience and show up the inner necessity which runs through all its forms, what business has he with the question, where and how Experience 'occurs'? Surely Experience ought to be to him the one and sole ultimate fact, which does not occur, but simply *is*. And the question of how and under what conditions experience 'occurs' in a human being or in any other kind of finite mind, is plainly an *empirical* question—a detail *within* the ultimate fact. In all this talk about 'finite centres' the cloven foot of that psychological Empiricism, of which the Hegelian has such a horror, seems to me to be protruding.

If he wishes to escape it, the Hegelian should be in dead earnest about his original principle, *viz.*, that experience is to be defined by its objective content and not by the circumstances of its 'occurrence'. 'Individual minds' should for him *form part of the objective content of Experience;* they are one element empirically distinguished from others, and I do not see what right we have to make all the rest of this objective content dependent on one particular element. On the contrary, we must surely say that these other elements (nature, for example, both inorganic and organic, plants, animals), however different in kind from human minds, have, in their own way, the same sort of existence as we have. To put it quite baldly: it is possible to argue that every form and kind of existence is in its own way a manifestation of the Absolute (or if we prefer religious language, a realisation of the divine); but it is quite impossible to argue that the rest of existence is a manifestation of the Absolute only in so far as it occurs in the experiences of human minds. Such a doctrine seems to make shallow, instead of deepening, the spiritual forms of experience, from which in the end Idealism derives its force and its inspiration. There are experiences in which the Self finds itself in the 'other,' and realises its unity with the universe, but it can do so only by recognising at the same time what I should like to call the *sanctity* of the independence of 'other' existence. Any theory which even seems to reduce the world to an accident of the existence of 'finite minds' violates this fundamental need of true Idealism. As against 'finite minds' (souls, if we like) material objects ('things') may stand lower in the scale of being, but being in the end they have in the same sense, if not of the same degree, as minds. Such a view has at least the advantage of inculcating a proper respect for the wealth and variety of the facts of experience, without the full recognition of which

the life of the Absolute can but be starved and impoverished. I hope I shall be forgiven if I quote here a passage from an article by Prof. Bosanquet[1] which has suggested to me the above line of thought. Discussing the theory that the Absolute is a 'society of selves'—a theory obviously akin to the view that Experience is found only in 'finite centres'—Prof. Bosanquet points out that we cannot get the 'content of life, pains, conflicts, sacrifice, satisfaction' out of a universe composed merely of persons; we need an 'outside' or 'other,' which must not consist simply of other persons. 'It is things, is it not? which set the problems of life for persons; and if you turn all things into persons, the differences which make life interesting are gone, except in as far as for practical purposes you turn the persons back again into things, *i.e.*, your food, or your own body, or the place in which you were born. . . . If the instruments and attributes of my life are turned into other persons, I, surely, am reduced to emptiness and deprived even of my character, for my character is not without external activity. This criticism may be mistaken, but it may pass as affirming that *we must take as actual the distinctions which give life its content.*'[2] To draw from this passage the moral for my argument: If the theory that experience occurs only in finite centres means that all I ever experience is in the end other finite minds or souls or selves like my own, but in most cases more or less thickly disguised, it lays itself open to all the difficulties above urged by Prof. Bosanquet against a universe of 'persons'.

Perhaps I am attaching an exaggerated importance to this point, and perhaps I am led, in consequence, to scent traces of this mistake, where there are none. However that may be, I have some doubts about certain passages which occur where Prof. Baillie discusses the ideal of knowledge as involving 'the completest unity in the greatest diversity'.[3] Speaking of the consciousness of objects Prof. Baillie there says: 'The diversity here lies in the two elements distinguished, *viz.*, consciousness and a somewhat or objects'.[4] This phrase may be a mere slip, or again my difficulties may arise out of the vagueness of the word 'consciousness,' but I cannot reconcile the statement just quoted with the definition of consciousness as always and everywhere an 'awareness of somewhat'.[5] If consciousness by its very nature involves

[1] "Contradiction and Reality," MIND, N.S., 57, p. 8.
[2] Italics mine.
[3] P. 80. I gratefully acknowledge that my attention was drawn to this point by a remark of Prof. Bosanquet's.
[4] *Ibid.* [5] Cp. above, p. 552.

'objects,' I do not see how consciousness and objects can be treated as the diverse elements which have to be reduced to unity. On the contrary, by taking his stand on this fundamental unity Prof. Baillie, as I understand him, turns the flank of Dualism. Besides how can you characterise or define or describe 'consciousness' or 'awareness' or 'experience' except by stating its objective content? Apart from that has it any quality, any definite feature? And if not, how can it form one side in an antithesis to be overcome? How can it, a mere featureless blank, supply a contrast to the objects? And how without this contrast can their unity be a problem to be solved? What makes it difficult to take the above passage as a mere slip is that similar passages occur elsewhere, *e.g.*, 'experience in all its forms starts with the distinction of consciousness from objectivity,'[1] or again: 'the object world is experience all in its diversity, the subject world is experience focussed in its unity'.[2] It occurred to me for a moment, that Prof. Baillie in distinguishing 'consciousness' and 'objectivity' might mean no more than the distinction, say, between our opinions and facts, things as they appear to us and as they are, or perhaps the psychological distinction between the object and a given person's perception of the object. However, for an Idealist these are surely distinctions falling *inside* Experience, and not distinctions which can help us to formulate the ultimate problem of philosophy. I am the more confirmed in this view by the fact that when Prof. Baillie proceeds actually to discuss particular planes of Experience, and to exhibit each as a special form of 'individuation,' *i.e.*, of unity in difference, we hear no more of the abstract opposition of consciousness and objectivity. On the contrary, *we get the unity in the shape of some universal principle or category*, which binds together the content of that particular form of experience. In short, what we have to do is simply to exhibit in *the structure of the objective content* of a given plane of experience the principle which gives unity to all its diverse elements. A given plane of experience is constituted just by its objective content, and if we wish to discuss the characteristics of that experience, we must discuss just *what* we experience, *i.e.*, the objective content. There can be no question then of distinguishing these two sides and somehow achieving their reconciliation. If we choose to say that at a given level of experience 'the mind reduces to unity' the objective manifold by means of a certain principle—there is little harm in

[1] P. 83. [2] P. 120.

this way of speaking as long as we remember that the principle itself is *as objective as* the manifold which it reduces to unity, and that in short *both* unity and diversity are characteristics of the total objective content of a given form of 'awareness'. That this is the line which Prof. Baillie actually follows when he comes to details may be illustrated by the case of 'Understanding' which has unity through the category of Force: in understanding 'the object is known as falling in its entirety inside a single conscious unity, which when resolved into its different constituents *just is the full content of the object.* . . . To seek to understand means either to grasp the unity holding together the differences of which we are aware, or it means showing how this unity breaks up and expresses itself in these various differences. . . . Now Force is just the objective way this effort appears when Understanding works, it is the principle on which it proceeds. . . .'[1] In view of such passages I think I may fairly claim, that Prof. Baillie himself bears witness against his words,[2] and that his practice is better than the theory which he had laid down at the start.

The last point which I wish to discuss is the question whether the order of stages of Experience from Sensation up to Religion, which Prof. Baillie traces for us with the help of Hegel, is to be understood as logical or historical or both. From a number of passages about the 'historical realisation' of experience,[3] we must conclude that the answer which Prof. Baillie would have us give is 'both'. But, if so, we should have been grateful if Prof. Baillie had discussed the difficulties of that answer, which will occur to most readers, and which indeed have often been pointed out. The question whether the development is temporal or logical may be put in more technical language thus: Are the various modes of Experience *stages* in the temporal evolution of the Absolute or *moments* in its eternal completeness? Or if we say they are both, how is the temporal side related to the eternal?

Lest we should argue *in vacuo*, let us get down to the basis on which Prof. Baillie himself takes his stand. It is that all the various modes or planes of experience are in actual fact found *side by side.* One may be higher than

[1] P. 190. Italics mine.

[2] Cp. also this passage from p. 72: 'Wherever we can be said to know, be the object what it may, that will fall under the scope of the inquiry. But this means that the problem embraces every way of being conscious of an object.' This seems to contain my point.

[3] *E.g.*, p. 106.

another, and even include it as a 'moment' in itself, but, for all that, the 'moment' exists *also* in its own right as a 'stage'. Thus we find sensation both side by side with perception and as an element in perception. The same applies, at the other end of the scale, to morality and religion. And so throughout the whole chain.

Furthermore, we must beware of falling into the mistake of regarding all lower modes of experience as modes of the highest mode. *I.e.*, we must not treat the highest mode *alone* as real and the rest as merely its 'appearances'. Thus we may not treat, *e.g.*, sensation as an incomplete form of philosophy or of religion. Each mode of experience contributes an element of value, all its own, to the Whole. Hence in arriving at the content of the Whole we must take all modes 'together,' for 'all forms of experience are real and actual just because they are experience'.[1]

This, if we choose, we may call the great empirical basis of Hegelianism. It represents the 'facts' which it accepts and tries to 'construct'.

Now this interpretation might be purely logical. That is, having made a catalogue, as it were, of all actual forms of experience we might set ourselves to arrange them in an ascending order of value according to the degree in which each realises a certain principle, say the principle of 'completest unity in greatest diversity'. Now one and the same principle cannot be expressed in a variety of forms, unless there is an identity of content in these forms; and this condition we find realised in that each lower stage reappears as a moment in the next higher stage. In this sense the highest stage may be treated as (1) distinct from all the lower, (2) containing them as moments within itself, (3) giving us clearest knowledge of the principle active in all stages. Thus we can see the justification for a passage like the following: 'Spirit therefore is "absolute" in the sense that, being the culmination, it contains as *moments* of itself what were formerly treated of as *stages* in the life-history of experience. These stages *were really* the content of Spirit *spread out* in detail; that they are so, is only seen when Spirit comes out as their result and goal,' etc.[2]

Now quite apart from the word 'life-history,' which raises special problems, the difficulties which I would urge against the above theory are these. Why should the 'moments' of Spirit appear *also* as stages and survive as such side by side with the stage in which they are moments? If the whole

[1] P. 132. [2] P. 310.

content of Spirit is explicit[1] in its 'moments,' why should it be further explicit ('spread out') in the quasi-independence of 'stages'?

Or to urge what is fundamentally the same objection in a different form: A mode of experience as a 'moment' in the highest stage is *not wholly identical* with the same mode as a 'stage' in its own right. Hence there arises the momentous question, which I regret to say Prof. Baillie nowhere raises, whether the advance from one stage to another is pure gain, or whether it does not also *involve some loss.* Take, *e.g.*, science and religion. Prof. Baillie himself points out,[2] that their attitude towards 'Nature' is very different, nature being for science a conceptual construction, for religion a manifestation of spirit. This shows beautifully, why the two modes must be kept apart—the same result follows also from the fact that religious categories do not 'explain' in science and *vice versâ*—but it does not show what becomes of science considered as a 'moment' of religion. When we cease to think in terms of a conceptual construction and think instead in terms of manifestation of spirit, there surely is some loss, however much gain there may be. A certain way of looking at nature is 'merged,' has become less explicit, has disappeared in the total mass.

And there is a third way in which I will put my criticism. All Experience deals with reality, each mode of experience in its own way. All lower stages deal with realities which, as they stand, *are not spiritual* (*e.g.*, Perception as dealing with Things; Science as dealing with Laws). The only ground which we have for saying that, in spite of appearances, they are at bottom spiritual is, that at the level where we apprehend reality as explicitly spiritual, these lower stages are taken to be included as 'moments'. But, then, the admission that this highest level is itself but 'a' mode of experience, a 'point of view' as Prof. Baillie himself repeatedly calls it, seems to rob it of some of its interpretative force. I mean: we may have a right to say that *from the point of view of religion* all reality is spiritual, but we have *no* right to omit this qualification and to assert straightway and absolutely, as Prof. Baillie does, that all reality is Spirit. For so long as each mode of experience is actual in its own right, reality, as it presents itself to us in experience, is not wholly spiritual. That follows inevitably from admitting each mode of experience both as a stage *and* as a moment, and from

[1] Let the reader recollect that for Prof. Baillie religion (the stage of Spirit) is the absolute Spirit's consciousness of its own self.

[2] P. 313 n.

making even the highest mode (in which we are said to take the point of view of the whole) after all *one mode amongst* others. In fact, it does not seem to me to be consistent to say (1) that in religion the Absolute Spirit is conscious of itself, (2) that religion is but a particular mode of human experience amongst others—even though it be the highest. And if we say that *all* reality is spiritual, because it is so for religion, we come into manifest conflict with the two principles (1) that we must not treat the lower levels of experience as forms of Religion, (2) that these levels deal with reality.

In short, at the level of experience at which all lower levels are present as 'moments,' reality may be Spirit; but from that we cannot take the step across to the assertion that all reality is Spirit, when the levels of experience are not treated as 'moments' of the highest, but are taken 'together' and 'side by side' as 'stages'. The *supreme concept under which all forms of experience fall is 'awareness of somewhat,' and Spirit is the objective 'somewhat' of certain forms only.* That is all, as far as I can see, which Prof. Baillie's argument in strict logic goes to show.

If, then, we turn from the logical aspect of the problem to the temporal implied in such phrases as 'life-history,' 'development,' etc., the main difficulty is, that even treating history as *the* manifestation of the Absolute *κατ' ἐξοχήν*, the highest stage of experience is not, either in the development of the individual or of the race, the last, but has *itself* a history and occurs itself in lower and higher forms. We saw this in the case of religion,[1] and I need not repeat here the difficulties which I pointed out there. Yet, without some reference to the actual development of experience as an 'historical' fact, it must be admitted that the mere logical arrangement of stages loses much of its attractiveness. It is very tempting to begin with some simple stage and to show how its inherent imperfections and contradictions—or, if we prefer it, the incomplete realisation of its immanent ideal—drives the 'typical individual mind' on to the next stage, and so on, until at the highest stage it attains to the vision beatific of the ideal in its full resplendent reality. Not an ignoble dream, but if it be the true tale of the ascent of experience, (1) we cannot consistently say that the highest stage is merely a 'point of view,' a particular form amongst others; and (2) we shall find it hard to say why the stages that our 'typical mind' leaves behind in ascending should survive as such. Indeed this difficulty by itself is enough to

[1] Cp. p. 555.

put any view of the development as purely temporal and historical wholly out of court.

The confusing mixture of a logical and a temporal point of view in tracing the inner coherence of experience arises, in the end, wholly from the attempt to trace the development of a 'typical individual mind'. This is nothing but an artificial construction, an audacious attempt to translate a logical connexion into an imaginary 'historical' fact.

I cannot conclude without an attempt to trace the real cause of the trouble which lies far deeper than a more or less dialectical criticism of the contradiction of 'stages' and 'moments' is capable of revealing. I know that the above criticism might be met by a frank abandonment of the whole machinery of stages, etc., and by saying instead: 'Take any particular form of experience and ask yourself, whether your mind finds satisfaction in it. And if not, ask yourself why not? and what is needed to supplement that experience so as to satisfy your ideal? If you ask yourself these questions, you will find yourself driven, by the inherent logic of your own ideal, from step to step through the course which has been traced. Begin to reflect on experience at all, and this is the line which your reflexion must inevitably follow.' Well, let us grant that these are the steps through which we must pass *if* we reflect, and through which we have passed *in so far as* we have reflected. But these statements clearly are abstract and hypothetical. The life-history of a 'typical' mind is not that of any actual, historical mind. The question is: where are we to attach the generalisation to the solid ground of fact? Where and how does the typical mind *exist?* And here we have reached the cause of the trouble. The words 'real' and 'reality' are ambiguous. The question what is real may mean: What exists? and in what sense does it exist? But it may also mean: What is the real nature of that which exists? In short, it is the old puzzle about *existence* and *essence* which thus meets us at the heart of Hegelian Idealism. It is unnecessary for me to trace the part played in the history of philosophy by this antithesis. It will be enough if I remind the reader of its supreme importance in present-day thought. In most recent times it has, in the distinction of 'existence' and 'idea,' 'that' and 'what,' supplied the central problem of Mr. Bradley's whole philosophy. It appears in the general distinction of 'fact' and 'value,' and it appears no less in such a very special problem as whether scientific conceptions such as ether, vortex-rings, corpuscles mean 'realities' (*i.e.*, existences) or are merely 'descriptive shorthand'. And again we find it in

the distinction of mental events (sensation, perceptions, ideas, etc.) and their 'meaning' or 'objective reference,' and in all the further questions that this distinction inevitably raises as to the 'existence' of the object over against the mental events. Generalisations are dangerous in philosophy—still, I think, it is a fair generalisation to say that Prof. Baillie deals with the problem of essence rather than that of existence. He has not asked: what exists? but: what does each form of experience reveal to us about the *nature* of the world and about ourselves, in short, about what exists? Perhaps he thinks the problem of existence uninteresting. But I cannot see that it is either unimportant or meaningless. Or perhaps he thinks that the two problems can only be answered together. That may be so, but do we know the answer? Mr. Bradley has argued not unconvincingly, that in *our* experience the answer is not found beyond the general postulate that it must be found in the *Absolute* Experience, which is not, *as such*, accessible to us. And thus the end of my criticism brings me back to the point from which I started: In the very heart of Prof. Baillie's position we have found a problem which post-Hegelian speculation in its very reaction against Hegel has emphasised and made explicit, but of which Prof. Baillie has offered us no solution.

V.—DISCUSSIONS.

REALISM AND INFINITE DIVISIBILITY.

One hardly needs to plead an excuse for coming back at any time to the problem of the infinite divisibility of space and time—for discussing again a notion to which Berkeley attributes "all those amusing geometrical paradoxes which have such a direct repugnancy to the plain common sense of mankind, and are admitted with so much reluctance into a mind not yet debauched by learning".

The matter can in no sense be regarded as settled. The old Zenonic difficulties cannot be said to have been admittedly laid to rest. A majority of those who accept the infinite divisibility of finite spaces and times accept it, I believe, in such a form that they may fairly be accused of holding what is flatly self-contradictory and absurd. In vain they quote authorities, appeal to the mathematicians, plead "the laws of our sensibility," or pass over the subject in silence, hoping that no one will stir up difficulties which seem to give rise to profitless dispute. We do not conquer our difficulties when we evade them, or when we appeal to authorities who appear to contradict themselves as freely as we contradict ourselves.

In a recent publication[1] I have discussed at length the doctrine of infinite divisibility, and have pointed out that the only serious attempt made by those who hold it, in the form alluded to above, to meet the difficulties in question is not a successful attempt. It consists in falling back upon the old distinction between the divisible and the divided.

Granted, it is said, that a given finite line, which we perceive, is infinitely divisible; it does not follow that it is composed of an endless number of parts, which a point moving over the line must exhaust, for the line is *infinitely divisible*, not *infinitely divided*.

That this distinction does not meet the difficulty was made clear enough by David Hume; and, indeed, a very little reflection seems to make it evident that we have here no way of escape from our troubles. We say a thing is divisible, because we believe that it can be divided, and we believe that it can be divided only because it has parts. It never occurs to us to maintain that a mathematical point is divisible. Why not? Because, by hypothesis, it has no

[1] *A System of Metaphysics*, New York and London, 1904.

parts. If it had parts, it would be theoretically divisible. And any constituent of a line whatever, if it is divisible, must be conceived as differing from the mathematical point in this particular. Hence, if a line really is infinitely divisible, it must consist of an infinite number of parts.

Now, it seems repugnant to the notions of space and time, as revealed in our experience and as treated in the sciences, to speak of a given portion of either space or time as composed of a limited number of partless parts. There is surely some reason why men should talk as they do of the infinite divisibility of spaces and times. We have the more reason for thinking the conception of infinite divisibility significant, and not a mere blunder, in that the paradoxes referred to above in the citation from Berkeley have been known and freely discussed for centuries, and have been felt as a plague by so many acute and earnest minds, but have, nevertheless, not discouraged men from adhering to what seems to be an indefensible doctrine. The common opinion appears to be: I can see no way out of these difficulties, but I *must* accept the doctrine.

Such considerations as these may well cause a prudent man to hesitate before he denies the infinite divisibility of finite spaces and times. He will be inclined, rather, to ask himself whether he is not in the presence of a truth which gives offence only because it has been misconceived, and which, purged of misconception, may be made void of offence. Certainly, it is too much to ask of a reasonable man that he accept as true what is inherently absurd, no matter who may champion the absurdity. But, on the other hand, it also seems too much to demand that he relinquish a way of regarding space and time that he rather dimly feels to be in real harmony with his experience, and that appears to be in harmony with sciences which he cannot but respect. There ought to be some way out of the seeming *impasse*.

I have, in the work referred to above, attempted to make such a restatement of the doctrine of infinite divisibility as will justify the attitude which it seems natural for us to take toward space and time, and will, nevertheless, not make preposterous demands upon our credulity. I have followed the line of thought opened up by Berkeley, but have had no intention of supporting his idealism, with which I am not in sympathy. In his very keen and kindly criticism of my book,[1] however, Prof. Miller has pointed out that it seems idealistic to speak of infinite divisibility as "a system of substitutions," and has suggested that, to bring my doctrine into harmony with realism, the chapter which contains such expressions would have to be rewritten.

I have no intention here of answering Prof. Miller, whose position seems to me well taken. There certainly is an idealistic suggestion in such expressions as the one alluded to. What interests me is to see whether the doctrine can be so expressed as to be unequivo-

[1] See MIND, April, 1906.

cally realistic, as it was intended to be. It is the task of this paper to find such an expression.

I have maintained that we are directly aware of two orders of experience, the objective and the subjective. What these are can best be made clear by illustration.

I stand at a considerable distance from a tree and look at it. I am conscious of a certain experience of colour. If I close my eyes or turn my head, this experience disappears. If I walk towards the tree, the experience gives place to a successive series of other visual experiences, differing more or less from each other. All such changes we are in the habit of describing as changes in our sensations; in accounting for them we habitually refer, both in common life and in science, to the changing relation of something to our organs of sense, and we confound such changes, if at all, only by accident, with a different class of changes of which we are aware just as directly.

Suppose that I stand at a certain point and look at the tree in question. My eyes remain open, and my body does not move perceptibly. Nevertheless, there may be striking changes in my experience. I say that the tree is swaying because the wind is blowing through it; or that it is falling because the axe of the woodcutter has cleft its stem. There are changes in my sensations here too. If there were not, I should know nothing of the wind or of the fall of the tree. But no man, in actual practice, is incapable of distinguishing between the two classes of cases referred to; and it is only as the result of a train of philosophical reflection—in my opinion misguided—that one may be led to describe the second set of occurrences as no more than a change in sensations.

We all say, in the one case, and we say it as the result of an observed distinction within our experience, that our sensations have changed, while the external thing, the tree, has remained the same. In the other case, we say that the thing has changed, as well as our sensations. We do not make such statements at random. They are the result of observed distinctions in what is revealed in experience.[1]

In the second of the two cases, we have revealed to us a part of the external world with which we busy ourselves both in common life and in the physical sciences. That there is a physical world, and that we know something about it, hardly seems to me matter of legitimate dispute. But when we come to ask ourselves what the world is, and when we realise that we can know it only as it is revealed to us directly or indirectly, there is certainly room for reflection, and it is natural that there should be differences of opinion as the result of such reflection. However, I think that, if

[1] I have tried, in my *Introduction to Philosophy* (New York and London, 1906), to give a brief and clear account of the two orders of experience, *i.e.*, of the physical and the mental. Is it impossible, within the limits of this paper, to discuss them fully?

we fall into perplexities, we should hold to the truth that we all do, as a matter of fact, distinguish between the objective and the subjective, and we should take great care not to be led into some illegitimate obliteration of the distinction.

Now, he who stands at some distance from a tree, and distinguishes between the motion of the tree and his changes of sensation as he opens and shuts his eyes, has experience of the two orders, the physical and the mental.

If he stands nearer, he does not see the tree as he saw it before; but he again has an experience of the physical and the mental. Were there no fixed relation between his experience in the one case and his experience in the other, he would, of course, not say that he perceives the same tree. But there is such a relation, guaranteed by observation, and the expression he uses is not without significance.

Again. The man may, leaving the realm of the directly perceptible, conceive the tree to be composed of atoms and molecules not revealed to sight or touch. Here he is concerned with something still different. But it should be remarked that he who takes this step does not take it blindly and without a reason. He passes, by analogy, from what he has experienced to something that he thinks himself justified in conceiving as though he could perceive it.

Here, too, if he will, he may talk of the distinction between subjective and objective. He may think of the atom as he or some other creature might be supposed to perceive it under such and such circumstances; or he may abstract from all this and may busy himself with the objective interrelations of atoms, as, in fact, certain physical sciences do.

It is important to notice that, at each stage, one may concern oneself either with the subjective or with the objective—with actual or conceivable experiences of minds, or with external things.

Let us represent diagrammatically the tree as it reveals itself, or is conceived to reveal itself, under each of the three aspects described above:—

x x
xx xx
xxxxxxxx

For the sake of simplicity and exposition I shall consider but the one object, and shall take into consideration only its space-filling aspect, the one with which we are immediately concerned.

He who stands at a considerable distance perceives the tree as having part out of part (xx), but he does not perceive it as having an unlimited number of parts, and it seems to lead to hopeless absurdities to say that what is directly revealed to him is constituted of such.

He who stands nearer also perceives the tree as having part out of part (xxxx), and more parts are perceptible than were perceptible before. But it seems just as absurd to say that we have here an unlimited number of parts directly presented.

He who conceives the tree as composed of atoms spatially related to one another may attribute to it vastly more parts (xxxxxxxx) than were perceivable in either of the above cases. He may not even try to picture to himself such a number of parts, but may use as their representative some mathematical expression. Nevertheless he will not confound the mathematical figures with the actual number of parts attributed to the object. He attributes the actual parts to the object which he conceives to exist, and he distinguishes between any symbol which he may employ and the parts attributed to the object. Moreover, the word "part" does not become meaningless to him when used in this way. It draws its significance from the experience of parts which he has had in perceiving physical things.

When we speak of a physical thing, we do not mean, either in common life or in science, the thing as seen from this distance or as seen from that distance, nor the thing as conceived in this or in that particular way. When we busy ourselves with these single experiences, as such, we are in the realm of the subjective. We are concerned with *how the thing looks;* and the question may always be raised: *looks to whom, and under what circumstances?* We are dealing with the thing as some one sees it or conceives it. The thing, taken simply, always means to us something more.

The single experiences referred to are not disconnected. It is possible, theoretically, to pass from one to another, and to say why the thing now looks like this, and now like that. Any one of them may represent the thing—it is the thing as perceived in a certain way. But how many of them may there be, and how may they differ from each other? This, surely, is a question for the psychologist and not for the student of physical science. When we have raised it, we are dealing, not directly with things, but with the appearances of things.

Is there any reason, that we can see, why one should stop at a particular point in attributing parts—not to some one's experience of a thing—but to *the thing,* in the sense given? Apparently not. In our treatment of *the thing,* the differences between different experiences are dropped out of account. There is a certain plan that runs through them all, they are *composite,* and we may develop our mathematical doctrine of the divisibility of spaces without regard to the limitations of this experience or of that. Of course, if it were developed without regard to the constitution of experience as a whole, it would be useless.

To me it seems that all this means that we can accept the *plan* of the objective order, of the physical world, and can, in pursuance of our purpose, overlook the subjective altogether. In a geometer's account of lines, surfaces and solids, we hear nothing at all about the varying sizes under which such present themselves to given persons under given circumstances. And yet the geometer is certainly concerned with what has a significance for the experience of

every one. Geometry is applied to the arts; it concerns practical life. But it could not possibly interest us, or, indeed, mean anything to us, if it had no bearing upon the things that we actually perceive and with which we have to do.

Now, I cannot but think that, when we thus overlook the subjective, when we abstract from individual aspects of the objective order, and busy ourselves with the objective order simply, with the plan that runs through our experiences as a class, we are dealing with the world in a thoroughly realistic way. We do not ask how the world looks to this person or to that; we inquire concerning its internal constitution.

This is not idealism. This is realism; and it is a realism which does not overlook the fact that every man who talks about the external world at all must be thinking about it as it is revealed to him directly or indirectly. The objects which compose it are not directly revealed to him in just the same way under varying circumstances; nor need they be revealed in just the same way to different persons. Nevertheless, geometry has a significance for him in the different phases of his own experience, and it is a common ground upon which different men may meet.

I have for convenience spoken only of space, but it is clear that we treat time in the same way. We speak of thousandths of an inch and of thousandths of a second. We guess at the probable or possible size of an atom, and we discuss the time taken up by its vibration. Had we never had any direct experience of succession, this would mean nothing at all to us. As it is, it does mean something. To give it a meaning we are not compelled to make the monstrous assumption that any brief period of time directly experienced by any one is actually composed of an endless number of parts. But the analogy between our treatment of space and of time is so close that I need not dilate upon the matter.

The path to idealism is a broad one, and easy to follow. It presents an unusual attraction to bright minds that are influenced by abstract reasonings, and are not content with that rather stupid adherence to instinct and tradition which so often serves as a guide to the feet of the unreflective. The idealist is right in pointing out that we can talk significantly of things only as we know them. We must ever deal with experiences of some sort. From such a position it seems an easy thing to go further and to maintain that all existence is psychical existence, and that we must always remain within the charmed circle of sensations and ideas. I may say frankly that for years this seemed to me the only road for the philosopher to follow.

Yet it is a road that appears to be condemned by the actual procedure of common sense and of science. *Things* are not treated like *sensations* by either of the two. We may deal with the subjective in both, and sometimes we do so. But we can also deal with the objective in both, and we constantly do so. A careful

analysis shows, I believe, that our procedure is in each instance justified.

There are such things as sensations; they are not to be confounded with physical things; and, as a matter of fact, we do not confound them with physical things. And since physical things and sensations are different—since the external world is not to be confused with the psychical experience of any one—it may be absurd to speak of the latter as theoretically infinitely divisible, while it is not at all absurd to talk in this way of the former.

George Stuart Fullerton.

VI.—CRITICAL NOTICES.

Studies in Humanism. By F. C. S. Schiller, M.A., D.Sc., Fellow and Senior Tutor of Corpus Christi College, Oxford. London: Macmillan & Co.; New York: The Macmillan Co., 1907, Pp. xv, 492.

What is most distinctive of Mr. Schiller's philosophical position is his view of the part played by subjective activity in the development of Knowledge. This is concentrated in his assertion that the individual mind *makes* truth and does not merely find or discover it. If we inquire in what way truth is made by our agency, we find that the doctrine of the making of truth presupposes a peculiar view of the nature of truth, and that this, again, rests on a certain conception of the nature of the original data furnishing the initial material on which our mental activity operates. Such data, considered in abstraction from the work of the mind, constitute what Mr. Schiller calls 'primary reality'. Primary reality, being a presupposition of the mind's activity, cannot itself be ultimately created by that activity. We can give no account of it except that we find it immediately presented in our experience. As having this character of immediacy, the content of primary reality may be said to consist of *facts*, and the advance of Knowledge may, in this sense, be said to proceed upon a factual basis. So far, Mr. Schiller seems to be affirming only what is familiar and commonplace. But at this point, he takes a new departure leading to startling results. He proceeds to point out that though primary reality is factual as consisting of original data which we do not make but merely find ready made, this does not justify us in identifying it with fact in the ordinary sense in which we contrast fact with fiction. On the contrary, primary reality includes impartially both fiction and fact, both what is true and what is false. The kind of being which belongs to it is merely presence to consciousness; it exists inasmuch as it enters into the experience of an individual mind. In this sense, what appears *is*, whether it be a true appearance or a false appearance. Seeing a match box, I may assume without hesitation that there are matches in it. That there are matches in the box is something which I believe or postulate and it must therefore be something present to my mind. On opening the box, I may find it empty; in that case I may proceed to say that what I believed or postulated, when I

thought that there were matches in the box, is *false*. But in pronouncing it false I presuppose its existence as a relatively original datum—a part of primary reality. Similarly what appears to us in dreams is in this respect on the same level with what appears to us in waking life. Whatever distinction we may make between dreams and waking experiences presupposes that both are immediately presented to consciousness; otherwise we could not compare and contrast them. But it is just this immediate presence which constitutes primary reality. Hence, primarily, reality is real in no sense in which a dream is unreal. It consists essentially of such stuff as dreams are made of. If we choose to call it fact, then "everything is fact quâ experienced, including imaginings, illusions, errors, hallucinations. Fact in this sense is anterior to the distinction of 'appearance' and 'reality' and covers *both*" (p. 187).

Starting from this conception of "primary reality," we find that the question concerning the nature of truth assumes a definite shape which predetermines its answer. The problem must be formulated as follows: What do we mean when we distinguish certain contents of primary reality as true from others as false? Plainly, we cannot mean that the true contents exist whereas the false do not. For the existence of that which is said to be true or false is presupposed as an original datum, whichever of these predicates we assign to it. It is equally evident that we cannot mean to assert the presence or absence of similarity or correspondence or any other relation between primary reality and something which is not primary reality; for primary reality, being all that is given as our original datum, we cannot compare it with anything beyond it, or make any assertion whatever concerning what is not included within it. The identification of truth with systematic coherence is also inadmissible. Two judgments P and Q are ordinarily said to be coherent when they are so related that if P is true, Q must also be true; similarly they are said to be inconsistent when they are so related that if P is true, Q is false. In this sense, the distinction of coherence and incoherence presupposes the distinction of truth and falsity; the distinction of truth and falsity cannot, therefore, be derived from it or identified with it. But if coherence be taken in any other sense, then, contents of primary reality, considered in abstraction from subjective interest and activity, are all equally coherent or incoherent. They are all on the same level as being simultaneous or successive appearances to the individual mind. What thus actually appears cannot be incompatible with anything else which actually appears simultaneously or successively. "So long as you do not care what appears, no course of events can be any more 'contradictory' than the shifting scenes of a kaleidoscope. Whatever appears 'is,' even though it lasts only for a second. Its reality, such as it is, is not impaired by its impermanence, nor by the fact that something else comes up and takes its place in the twinkling of an eye" (p. 220).

Mr. Schiller concludes (1) that the predicates *true* and *false* can

apply to nothing but primary reality, and (2) that they can have no application to primary reality when it is considered without reference to the interest and activity of the individual subject to which it is presented. If, however, we consent to take account of subjective interest and activity, it becomes possible to give a clear, consistent and satisfactory answer to the question: What is truth? We may regard the adjectives *true* and *false* as *valuations* expressing the satisfying or unsatisfying nature of the contents of primary reality. The distinction of true and false will thus be a special case of the more general distinction of good and bad. But it is only a special case which has to be defined and distinguished from other special cases. We have to determine what particular sort of valuation is expressed when we call one content of immediate experience true and another false. Mr. Schiller deals with this problem very carefully and conscientiously. In the first place, it is clear to him, that truth is not a primary but a derivative value. Unless we began by finding our experiences satisfactory and unsatisfactory, in other ways we could not appreciate them as true or false. Further, there would be no place for the distinction, if we found everything perfectly satisfactory. For, if this were so, we should simply acquiesce in appearances as they happened to occur, having no motive for accepting some to the exclusion of others. But, as a matter of fact, we are always more or less discontented with what we find at any moment and we are constantly striving to alter it. Our action in part takes the form of selective attention emphasising certain items of primary reality and ignoring other items. It also partly consists in imagining alternative possibilities in contrast to the situation initially presented. But if I understand Mr. Schiller aright such activity as this would not of itself be sufficient to generate the distinction between truth and falsity. This is essentially dependent on the endeavour to attain ends by the use of means—on what may be called distinctively *practical* activity.[1] Practical activity does not proceed blindly. It is its nature to be prompted and guided by appropriate contents of primary reality which are suggestive of special lines of behaviour issuing in the "unmaking and remaking" of our original or relatively original data. But no contents of primary reality as they are passively given suffice of themselves to determine practical activity. It is indispensable that besides being *given* they should also be selectively *taken* or "*accepted*" by the subject as the basis of his operations. As thus accepted they become "assumptions" or postulates which claim to be true. Their claim to be true is simply a claim to afford guidance which shall enable us actively to control the course of our experience—to predetermine the flow of primary reality in accordance with our needs and desires. Whether the claim is justified or not can only be determined by results. The proof of the pudding is in

[1] Mr. Schiller does not formally define practical activity in this way. But I gather from general study of his work that this is virtually the way in which he applies the term.

the eating of it. So far as our assumptions lead to practical success in the endeavour to control our experience, they cease to be mere claims and become validated claims. They have earned their title to be valued as true. Truth is the value which belongs to an assumption inasmuch as it guides to efficient action. On the other hand, falsity is the label which we attach to assumptions which lead to failure instead of success.

We are now able to understand precisely what is meant by the assertion that ultimately we make truth and do not merely discover it. The "making of truth" is a phrase which serves to give rhetorical emphasis to the distinctive features of Mr. Schiller's theory as contrasted with opposing views. But we must not take it too literally. The individual makes truth inasmuch as truth is throughout relative to his aims and interests and varies as these vary. In so far as an assumption is actually found serviceable for any purpose pursued by any mind in any phase of its development, the assumption is *to that extent* true. For other minds or for the same mind at another time entertaining other purposes, the assumption may prove more or less unserviceable and *to that extent* it is false. Again, it is we that make truth inasmuch as it is we that make *assumptions*. The contents of primary reality can acquire the value which we call truth only on condition that we accept them by our own act as the basis of our practical procedure. It is important to note that this act of acceptance or postulation always bears the character of a selection among possible alternatives. Hence it is always open to us when one assumption proves inadequate to make trial of another. We are limited here only by the limits of our imagination of possibilities. As experience advances, new prospects open out before us and our purposes become more comprehensive and far-reaching. Hence our working postulates require corresponding modification to adapt them to the altered conditions of their application. Old truths become relatively obsolete and have to be reshaped to meet new needs. From the later point of view the old truths are then revalued as false, so far as they are then recognised as inefficient. But they are false only from the later point of view and not from the earlier. They were true once in so far as they fulfilled their function of furthering practical activity; they have ceased to be true in so far as they now fail to fulfil this function. Thus truth is not something fixed in rigid immobility independently of temporal vicissitude. It changes and develops as our needs change and develop. It is of our own making as being relative to our varying purposes and to our variable selection of working postulates. It is made by us in this sense; but in this sense only. There is another side to Mr. Schiller's doctrine, which it is very important to bear in mind, though he does not himself lay stress on it in this connexion. His whole account of the making of truth implies that the part played by the mind in the process is always of the nature of an experiment. But an experimenter cannot predetermine what the issue of his experiment will

turn out to be. The very fact that he is experimenting implies that in this respect he expects and desires a decision between alternatives to be imposed on him instead of being made by him. So far as the experiment leaves him free to choose between alternatives, it fails to fulfil its function. Similarly, when once we start with a certain purpose and a certain guiding assumption, the result is determined for us and not by us. We do not ourselves decide but only find by trial whether or not the guiding assumption will lead to successful control of our experience. To this extent, then, according to Mr. Schiller, truth is something which is imposed on us and which we desire and require to be imposed on us. Truth could not be made, were it not also, in this sense, *given ;* any more than we could walk without anything to place our feet on.

The pragmatist view of the nature of truth is fruitful in consequences. It leaves no room for theories which have no discernible bearing on the process by which human interests move towards their own satisfaction. *A fortiori*, it condemns all doctrines which by their inherent nature tend to disable or paralyse human activity in the pursuit of its ends. Accordingly we find Mr. Schiller strenuously opposing all views which, in his opinion, render human agency illusory by treating the universe as completely predetermined irrespective of our voluntary activity. This is the ground of his advocacy of free will as against determinism, of his insistence on the reality of change, and of his uncompromising hostility to the doctrine which makes individuals and their doings unreal "appearances" of a timeless Absolute. Humanism must establish the reality of Freedom. And if Freedom is to be real there must be indetermination ; the reality which is to be determined by our agency must be relatively indeterminate when considered in abstraction from our determination of it. Further, our choice must itself be real and not merely an outcome of other conditions ; it must in its own right count as a factor in determining the course of events. If we inquire how far the determinable indeterminateness of the universe extends, Mr. Schiller answers that this can only be ascertained by trial, and that previous failure need never be regarded as absolutely destroying all hope of ultimate success. Hence our best working postulate is that the universe is "completely plastic". This means that even the most stubborn facts may prove modifiable by our efforts if we can only hit on an appropriate mode of treating them. Where there is life, there is hope, and we ought never to take up a final *non possumus* attitude. Of course, it is to be borne in mind that the reality of which Mr. Schiller is speaking, is ultimately what he calls 'primary reality'. It is this and not the Bradleyan Absolute or an 'independent' material world to which he attributes complete plasticity. It is an open question how far such complete plasticity is reconcilable with any other view of the original data on which the mind operates.

Mr. Schiller, then, condemns and he is bound by his principles to condemn all theories which seem to him irrelevant or hostile to the

progressive satisfaction of human needs. To all other claims to truth which have in any degree been validated by their successful application or which promise fruitfulness in the future, his attitude is one of cordial hospitality. In so far as they enable us or have enabled to control our experience in accordance with our needs, they are to be valued as true. In so far as they appear to yield a basis for new experiments in this direction, they are, at least, promising hypotheses. But even the most firmly established truths have no title to absolute finality. However efficient they may have proved and however wide, various and important, the interests which they subserve, they remain to the end only postulates for the guidance of action; they are, therefore, always to be regarded as liable to modification when they are confronted with requirements to which they are inadequate. Their truth is their efficacy as postulates and they are therefore always liable to be superseded by newer truths which are found more efficient.

The "independent" existence and operation of material things is a postulate which has been and is being verified in a superlative degree by its practical success. It is therefore rightly valued as an established truth. But this constitutes no reason for regarding its truth as different in kind from that of other truths which have not been so fully substantiated. In principle there is no reason for treating it as incapable of modification and improvement in view of other interests than those for which it has proved adequate. Like other truths, it is of our making and it may not be a completely finished product. If I understand Mr. Schiller aright, the making of it is supposed by him to take place in the following way. The individual finds given, as original data, certain appearances which include as part of their content the appearance of having existed before they were perceived and of being such as to persist after they cease to be perceived. These appearances of independence are, however, merely contents of primary reality and, as such, they are in themselves neither true nor false, being equally capable of becoming either. The same appearance of independence is present to the mind when we dream of a stone and when we see a stone in waking life. But the dream appearance is rightly condemned by us as false, and the appearance in waking life is rightly valued as true. The question at issue concerns the nature of the difference between the false appearance of independence and the true. According to Mr. Schiller, there is only one essential difference assignable. When the appearances of independence in waking life are accepted as postulates for the guidance of practical activity, they prove efficient in enabling us to control the course of our experience. Hence, they are valued as true, and because what it is postulated is 'independent' existence, they are also valued as *real*. On the other hand, dream appearances of independence turn out to be useless when we endeavour to apply them as working assumptions. Hence they are, for us, untrue and unreal.

Each of us, as a member of society, recognises the existence of other minds in social communion with himself. This is a pre-eminently successful postulate and it is therefore true in a very high degree. Indeed, it is of more fundamental importance, from Mr. Schiller's point of view, than the independent existence of material things. For, human purposes can in general only be achieved by human co-operation; but co-operation depends on mutual understanding and agreement, which imply the sharing in a common truth. Postulates can only be successful if they are accepted by many minds entertaining the same aims and purposes. Thus an assumption on the part of an individual which is rejected by the society in which he lives is a failure. In the long run he must either gain social acknowledgment for it or abandon it. Thus the validation of human claims to truth must in general take the form of a social validation. None the less, the recognition by each mind of the existence of other minds is itself to be regarded as having no other ultimate justification than its working value in enabling the individual to control the course of his experience. In the successful postulation of other human minds, we become, in the first instance, members of human society. The postulate then becomes of paramount importance as a controlling condition of the process by which other human truths are tested.

I have now given a fairly complete account of what I take to be the essential tenets of Pragmatism in the special form which Mr. Schiller gives to that doctrine. If I have in any respect misunderstood and consequently misinterpreted his meaning, I think that I must, at any rate, have expressed myself with sufficient relevance and distinctness to make it easy for him to put me right. In any case, failure to understand, on my part, will not be due to any want of lucidity in Mr. Schiller's exposition, but to my own dulness or to the inherent difficulties of the subject.

His doctrine, as I understand it, appears to me to possess a high degree of internal consistency. I do not affirm that it is entirely coherent; but the incoherence, if it exists, seems of too subtle and evasive a nature to furnish matter for profitable discussion. Criticism in this direction is likely to be confronted with serious difficulty in deciding whether Mr. Schiller's assertions are really inconsistent with each other or only with the preconceptions of the critic. The error of the system, if it be erroneous, is to be sought for rather in its initial assumptions than in the logical connexion of these assumptions with the consequences developed from them. Its Achilles' heel seems to me to be the conception of 'primary reality'. Our original data cannot consist in alternative possibilities capable of being either true or false. The factual element in what we call facts, in distinction from inference, assumption, hypothesis, theory, etc., cannot be of this nature. It must be immediately experienced in a radically different sense from that in which Schiller and James speak of immediate or "pure" experience. Disagreement on this fundamental question com-

pels me also to disagree more or less with nearly all Mr. Schiller's main tenets in the form in which he has stated them. The limits of space prescribed to a review debar me from detailed discussion either of this fundamental difference between us or of the further divergences which it necessitates. I accordingly reserve a full treatment of this topic for a future article in MIND in which I shall endeavour to develop my own positive view in contrast to what I regard as unsatisfactory in Mr. Schiller's position.[1]

For the present, I shall confine myself to two criticisms. The first relates to Mr. Schiller's uncompromising polemic against the acceptance of propositions as self-evident or necessary *a priori*. He seems to assume *a priori* and as self-evident that all "a priorism" and reliance on self-evidence must necessarily be a peculiarly pernicious form of dogmatism. He seems to assume that in accepting a proposition partly or wholly on the ground of its self-evidence, we must, so to speak, regard it as impregnably fortified within its own defences, and secure against all possibility of future correction or modification. There is here, I think, some confusion. It is one thing for me to affirm that a proposition is self-evident: it is quite another for me to affirm that I am an infallible judge of its self-evidence. But if I do not claim infallibility, there is no reason why I should dogmatise; there is no reason why I should refuse to submit what I take to be self-evident to further sifting and testing through its application within the growing system of knowledge and action. And the sifting and testing will have a two-fold bearing: it will be a sifting and testing not only of the truth of the original proposition, but of its supposed self-evidence. If the proposition is false, a fully satisfactory result is not obtained, unless the appearance of self-evidence is destroyed. It is not enough, that I should be externally reduced to admit that somehow or other it must be false, although I am still unable to understand how it possibly can be so. The testing process is not complete until I am enabled to see precisely why what I took to be self-evident is really not self-evident. One who thinks it necessarily true that dwellers at the antipodes must fall off the earth's surface, may have his conviction shaken or overthrown by the testimony of circumnavigators. But this is not of itself sufficient. He has not grasped the whole truth of the matter until he has been led to detect the inadvertence and confusion underlying his fallacious estimate of self-evidence. In general, Mr. Schiller seems to me to be mistaken in assuming that because all claims to truth require verification, they are therefore all initially groundless. Some may have grounds which subsequent experience will only serve to make clearer, and none, I should maintain, are in this respect absolutely arbitrary postulates.

My second criticism of Mr. Schiller's pragmatism is itself of an

[1] I shall also take the same opportunity to pay a debt which I owe to Mr. Prichard by showing the real purport of certain views of mine concerning presentation which he has failed to understand.

essentially pragmatic nature. I find a difficulty in the practical application of his theory which seems to indicate a radical defect in it. After close study of his work, the only interpretation which I can put upon his central thesis is that the working value of a postulate is not merely the sole test of its being true, but is virtually identical with its truth. Now, when I attempt to apply this doctrine to my belief in the existence of other minds in social communion with mine, I find myself confronted with a serious difficulty. The belief does indeed work admirably in enabling me to control the course of my experience, and thus ministers to my interests in the highest degree. But the most important part of its working value seems to be lost, when I seriously attempt to identify working value with truth. I am interested in my fellowmen as having experiences of their own in the way of perception, thought, emotion, desire, choice, etc. It is indispensable to this interest that I should posit "primary reality" as existing for them which does not or need not exist for me. My sympathy with my neighbour's headache presupposes that he is actually feeling it. But according to Mr. Schiller's theory, my belief in other minds might be as true as truth can be, even though there were no emotions, feelings, desires, purposes, etc., experienced by any one except myself. All that, in his view, is required to constitute truth, is that I should postulate experiences other than mine, and that this postulate should enable me to control my own experiences. The postulate would still be true even though I were merely dreaming of the existence of other minds, provided that it gave me a guiding clue for actively determining the development of my dream. On the same condition, it would be true if human bodies behaved as they actually do, without any connexion with guiding minds. Now it seems clear enough that so long as we continued in our fool's paradise, it would make no practical difference to us whether or not there actually existed experiences or "primary realities" other than our own. But what I wish to point out is that we can remain in our fool's paradise only so long as we abstain from the fruit of Mr. Schiller's tree of knowledge. When I clearly and resolutely treat the truth of my belief in other minds as virtually consisting in its efficiency as a guide to practical activity, then all which makes it most precious to me evaporates. My interest in others becomes a veiled form of self-interest and my world becomes cold, dull and heartless. Mr. Schiller would certainly be ready to abandon his own theory rather than accept this result of it. It would seem his pragmatism itself fails to satisfy the pragmatic test, and therefore requires modification and correction. He cannot, I think, consistently deny that he does identify the truth of a postulate with its working value. For this identification seems to underly his whole treatment of the subject. His theory of Knowledge proceeds throughout *as if* truth were merely working value. If he admits any other element in its constitution, he certainly fails to show what this element is or what

difference it makes. And according to Mr. Pierce's pragmatic criterion, this is equivalent to saying that he does not recognise it at all.

In conclusion, I would draw attention to certain vital points of Mr. Schiller's doctrine with which I find myself in cordial agreement. He seems to me to be quite right in insisting that theory of Knowledge is essentially concerned with "human truth"—that it is concerned with the distinction which we ordinarily make in daily life and in scientific inquiries between certain propositions which we recognise as true and others which we recognise as false. He is right also in maintaining that there is no true proposition recognisable as such by us which is not verifiable and no falsity which is not corrigible by its application to relatively new data. I agree with him, further, in the view that all adequate verification involves the successful use of propositions as postulates for the guidance of our activity. Truth must therefore be, in some sense, relative to our emotions, desires, purposes, etc. Finally, I am at one with him in his incessant protest against any form of doctrine which implies or suggests that the content of the universe and the course of events is entirely predetermined independently of our voluntary agency. If a broad acceptance of these general positions is sufficient to constitute pragmatism, I am a pragmatist. But I do not accept any of them in precisely the form in which Mr. Schiller presents them, and I therefore remain in doubt whether he would be willing to concede me the title.

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The Theory of Good and Evil: a Treatise on Moral Philosophy. By Hastings Rashdall, Fellow and Tutor of New College, Oxford. Oxford: at the Clarendon Press, 1907. Two volumes. Pp. xx, 312; xv, 464.

This work, dedicated to the memory of its author's two masters in ethical Philosophy, Thomas Hill Green and Henry Sidgwick, is professedly an attempt to formulate an ethical theory which, while deeply influenced by both, is more adequate to the demands of contemporary reflexion than the theory of the moral life which is to be found either in the *Methods* or in the *Prolegomena*. "Neither of the great writers to whom I feel I owe most in the special department of Ethics . . . can well be regarded as having said the last word upon the subject by students of a generation later who have profited not merely by the criticism which each of them supplies upon the other, but by the general progress of Philosophy since the first appearance of Sidgwick's *Methods of Ethics* (1874) and of Green's *Prolegomena to Ethics* (1883). Since the last-mentioned date the supposed easiness of this branch of Philosophy, or the superior attractiveness of Logic and Metaphysic, has led perhaps to

a certain unwillingness to write separate treatises on Ethics, at least among those who take what one may call a constructive view of the subject. But the period—almost a quarter of a century—which has elapsed since the death of Green has been a period of great philosophical activity, and (I venture to think) of great philosophical progress, and there has been much incidental treatment of ethical questions in the works both of English and of foreign Philosophers. There seems therefore room for a fresh systematic treatment of the main problems of Moral Philosophy in what I will venture to call (in spite of great differences both of opinion and of temperament) the spirit which animated both of them" (Pref., pp. vi., vii.). It seems a little strange to characterise the ethical work of recent German and French writers as "incidental," and in spite of his own disclaimer of "a more exhaustive knowledge of the literature bearing upon this and cognate subjects"—a knowledge, he suggests, which is not to be expected from a busy Oxford Tutor—the author knows enough of the foreign literature (German at least) to know that attention has been chiefly directed, on the Continent if not in this country, to the ethical aspect of the philosophical problem. But there will be general agreement that there is plenty of room for such an ambitious ethical undertaking as the present, and that the author's wide and thorough knowledge of the subject, his practical interest in the questions of Ethics, and his cautious and balanced temper of mind, promise much for the success of such an undertaking.

The work is divided into three Books, the first of which, entitled "The Moral Criterion," occupies the first volume, while the second volume contains Book ii., "The Individual and the Society," and Book iii., "Man and the Universe". It will be observed that the first two Books are purely ethical, while the third deals with the metaphysical implications of ethics. The relation of the second to the first Book is thus more particularly explained: "To arrive at a clearer and more definite conception of the Moral Criterion—a clearer and more definite answer than is contained in that common moral consciousness from which we must all start, to the question 'What ought I to do, and why ought I to do it?' will be the object of our first book. In the second book I shall enter at greater length into some of the current controversies connected with our subject, by the examination of which I shall hope further to elucidate and define the results arrived at in the first book. Most of these controversies may be said to centre round the question of the relation of the individual and the individual's good to society and a wider social good. I have therefore styled the book 'The Individual and the Society'." The division of topics does not commend itself to the reader as a very happy one. It would have been better, I think, to have included the controversial chapters of Book ii., on "The Hedonistic Calculus" and on "Self-realisation and Self-sacrifice," as well as the chapters on "The Commensurability of all

Values" and on "Moral Authority and Moral Autonomy," in the general discussions of Book i., and to have reserved Book ii. exclusively for the constructive consideration of the relations of Society and the Individual. The work would further have greatly gained in value, in my opinion, as "a treatise on Moral Philosophy" by the omission or condensation of much of the controversial matter (especially in those cases in which there is nothing new to be said on the controversy, and the controversy itself has really become antiquated, as in those of "Psychological Hedonism" and "The Hedonistic Calculus") and by a very considerable condensation of the argument in Book iii. This last Book seems to me much inferior in interest and value to the earlier Books. One feels, in reading it, that the author is retraversing ground which has been gone over again and again in recent years (in Gifford lectures and otherwise), and that he seldom, if ever, succeeds in throwing any fresh light upon the ultimate problems here discussed. In spite of the generous space which he allows himself, considering that he is writing an ethical treatise, and of the great amount of reiteration which the Book contains, the author is constantly reminding us of the limitations by which his argument is beset, and tantalising us by stopping short of the real *crux* of the problem. The space thus saved might have been devoted with great advantage to the discussion of some of the more concrete questions of individual and social morality. As the author himself says, "In the present work the treatment of particular virtues or duties has hardly gone beyond the limits of illustration. To give a more detailed account of the ideal of life—of the chief goods of life, their relative importance or their place in *the* good, and the main rules of action which conduce to the attainment of these goods, is, I believe, a task which falls strictly within the province of Moral Philosophy. It might even be contended that the very general discussions with which this work has been chiefly occupied are the mere Prolegomena to an ideal 'System of Moral Philosophy'. But in the present state of ethical science, there is no consensus even as to the Prolegomena. It is here that the purely theoretical or strictly philosophical difficulties of the subject lie, though it is after these Prolegomena are settled that the real difficulties for the practical ethical judgment begin" (vol. ii., p. 459). I cannot help thinking that there is a certain amount of consensus as to the Prolegomena which a writer of the present day is warranted in taking for granted, for example, the falsity of Psychological Hedonism and of Indeterminism, and that the more strictly all extra-ethical questions are excluded from an ethical treatise, and the more practical and detailed is the treatment of the ethical problem itself, the better will be the result from the ethical point of view. The author, however, holds out the hope that perhaps he will "some day be tempted to essay some fuller account of the practical ideal which to my own mind would seem to result from the principles which I have endeavoured to indicate".

One is conscious of a double purpose running through the work: the author is at once ambitious to make an independent contribution to ethical science and concerned to provide a text-book for undergraduate students. The work is, he admits, "on a larger scale than the books generally described as 'Text-books,' or 'Introductions,' and is occupied to some extent with difficulties and controversies which can hardly be called 'elementary'"; yet in writing it he has "had chiefly before his mind the wants of undergraduate students of Philosophy" (Pref., p. v.). The book bears unmistakable traces of the lecture-room, and the admirably clear form of the presentation should render it very useful from this point of view, while the difficulty which arises from its size and from the inclusion of so much controversial matter in Book ii. and from the metaphysical character of Book iii. might be overcome by the separate publication of the first volume, which contains the first Book alone. (The author himself suggests that "those who want a short and fairly elementary treatment of the subject might perhaps read Book i. by itself, or pass at once from Book i. to Book iii.".) Yet there can be no doubt that this secondary purpose has affected injuriously both the plan and the execution of the work, and has in considerable measure diverted the author from the more important task of producing an independent treatise, while the latter ambition has so far asserted itself as to interfere rather seriously with the production of an ideal text-book.

Mr. Rashdall calls his own ethical theory "Ideal Utilitarianism," because "it combines the utilitarian principle that Ethics must be teleological with a non-hedonistic view of the ethical end," and holds that "actions are right or wrong according as they tend to produce for all mankind an ideal end or good, which includes, but is not limited to, pleasure" (vol. i., p. 184). Not that the good consists of various elements unaltered by their relation to each other. "We can give no account of '*the* good' without breaking it up into various 'goods'; and yet no one element in the good can be unaffected by the relation into which it is brought in the consciousness of the person enjoying it with the other elements in that good. In particular, the value which is set upon the good will determines the kind of pleasure which can be regarded as good by the good man" (vol. i., p. 220). "It seems to me perfectly clear that the moral consciousness does pronounce some goods to be higher than others; and that at the head of these goods comes Virtue, while many other things—intellectual cultivation and intellectual activity, æsthetic cultivation, emotion of various kinds—are also good and of more intrinsic value than mere pleasure" (vol. ii., p. 37). This view has been widely held. It is the view of Plato and Aristotle, of "all the older English moralists, in whom Platonic and Aristotelian traditions were universalised by Christianity—the view of Cumberland, of the Cambridge Platonists, and (substantially) of Clarke. It was equally the view of the Moral Sense school." And now that

the malign influence of Kant has spent its strength, "on the whole there is observable a very general tendency to come back to the view of the older seventeenth-century writers, and to assert that Morality consists in the promotion of true human good, but a good of which pleasure is only an element. . . . If it is not the view of Hegel, in whom Moral Philosophy is practically merged in political Philosophy, it is at least the view of many who call themselves his disciples. And yet the system remains without a name. . . . We still lack a neat and recognised term to denote the view of Ethics which is at once teleological and anti-hedonistic. On the whole, perhaps, the term 'ideal Utilitarianism' seems the best that is available. Eudæmonistic Ethics might better serve to distinguish such a view from the rigorist or ascetic theory which refuses even to include pleasure in its conception of the end; but (through the persistent misrepresentation of certain writers) the term Eudæmonism has become too much confused with Hedonism to be wholly free from ambiguity" (vol. i., pp. 216-218).

The present reviewer, who has persistently used the term "Eudæmonism" to describe a view essentially similar, without experiencing the inconvenience referred to, is perhaps too deeply committed to the general view here advocated to judge its merits and demerits quite impartially, but the author differs sufficiently from other representatives of the theory to enable us to signalise the nature of these divergences. In his anxiety to avoid what he calls "the 'self-realisation' doctrine of our ethical exquisites," a doctrine against which he brings all the stock objections (Book ii., ch. iii.) and which he misunderstands and misrepresents no less fatally than the late Prof. Sidgwick in his Lectures on Green, he comes very near stating a doctrine which does not escape the vices of a mechanical and intuitional account of the various elements in the good. It is assumed, indeed, that these various elements or "goods" are ultimately reducible to the unity of *the* good, that our several judgments of moral value can be harmonised in a single judgment of moral value. But inasmuch as their unifying principle remains undiscovered, each of these judgments is accepted as (for us) an ultimate and inexplicable deliverance of the moral consciousness, to all intents and purposes an intuition of the moral sense or individual conscience. "Such formulæ as 'activity for the sake of activity' or 'self-realisation' spring from an unwillingness to admit the simple, ultimate, and unanalysable character of the idea of good, without the admission of which there can be no such thing as Morality. The contents of our moral consciousness cannot be translated or paraphrased into any language which does not contain the word 'good' or its synonym" (vol. ii., p. 106). The result is a scheme of "lower" and "higher" goods, which *remain* lower and higher, in spite of the admission that the worth of each element in the good is determined by its relation to the other elements or to the good as a whole. "The vast majority of those states of consciousness to

which we attach value . . . appeal to our higher and to our lower nature at the same time. . . . The lower kind of satisfaction often depends upon and arises from our consciousness of the highest kind of value" (vol. ii., p. 56). But in that case can it any longer be properly described as a "lower kind of satisfaction"?

Closely connected with this defect is the account of the place of pleasure, which remains merely one among other goods or elements of good. "It is true that pleasure is an element in every state of consciousness to which we can assign ultimate value. . . . Even with regard to Virtue, it is difficult to answer the question whether I should judge Virtue to possess value, if it gave me no sort of pleasure or satisfaction. . . . Pleasure is an element in everything to which we attach value" (vol. ii., pp. 37, 38). It would surely be more adequate to say that satisfaction or pleasure is our *sense* of value; that, instead of being one of a series of goods, it is their common mark or criterion, the quality by which we apprehend their value, while at the same time it is not dissociated from the rest of our nature, and its reports of the comparative moral value of different activities are more or less trustworthy as the judgments of reason become the judgments of sensibility, as we learn to find our pleasure in the right objects or in those activities in which the true or rational self is realised. As Aristotle would say, that which gives pleasure or satisfaction to the good man is good, and is known to be good because it gives the good man satisfaction.

In general the theory leaves one with the unsatisfactory impression of a miscellaneous assortment of "goods" rather than that of a unitary good or system of goods. It is not only as regards the relation of virtue to pleasure, but as regards the relation of the so-called "higher" to the so-called "lower" goods and more particularly the relation of what Aristotle calls "theoretic" to "practical" good, that one is conscious of this defect. The ultimateness and inexplicableness of the several goods or values leaves us necessarily without a theory of their mutual relations, without any common measure of moral value. The same defect attaches to the account of the relation of individual to social good. It is good to act benevolently, to sacrifice one's own individual good or pleasure; but the latter also is good, and stands in no organic relation to the former good.

But Mr. Rashdall's point of view will be made clearer by following in greater detail his own method of reaching it, by considering the truth and the error contained in the opposed theories of Utilitarianism and Intuitionism or Rationalism. Having disposed of the older, or simply hedonistic, form of the Utilitarian theory in his discussion of "Psychological Hedonism" (Book i., ch. ii.), he makes Sidgwick's theory of "Rationalistic Utilitarianism" the subject of more special and searching examination (ch. iii.), arguing that "the acceptance of rationalistic Hedonism kills and eradicates all those impulses upon which it has to depend for the practical fulfilment of

its own precepts, by pronouncing that they have no true worth or value—no less so than Mill's Associationist explanation of the love of Virtue as due to a psychological confusion and muddle-headedness comparable to that of the miser. . . . The whole force which makes Reason appeal to men as deserving of respect it derives from that conviction of the intrinsic value or goodness of rational conduct which Reason, as interpreted by Sidgwick, pronounces to be illusion" (pp. 58, 59). Sidgwick's misunderstanding of the idealistic theory of good is also well exposed. "The important point to insist on is that, when we pronounce character to have value, we are just as emphatically as the Hedonist pronouncing that it is in actual consciousness that value resides, and in nothing else. It is the actual consciousness of a man who loves and wills the truly or essentially good and not mere capacities or potentialities of pleasure-production . . . which constitutes the 'goodness' or 'virtue' which is regarded as a 'good' or 'end in itself' by the school which Prof. Sidgwick is criticising. A 'virtue' or 'faculty' is, of course (as Prof. Sidgwick urges), a mere abstraction, but only in the sense in which pleasure is an abstraction also. . . . No doubt the self cannot be regarded as having value when abstracted from the successive conscious states in which it manifests itself, but it is equally impossible to estimate the value of the conscious states in entire abstraction from the permanent self which is present in all of them" (p. 65, text and footnote). "To ask what is the ultimate good of man apart from his knowledge of the 'objective relations' in which he stands to the world and to his fellow-men is really to ask what *would be* the good for man if he were a mere animal" (pp. 68, 69). Mr. Rashdall's statement of the result of this examination of Rationalistic Utilitarianism suggests the criticism already made upon his own theory: "We have felt compelled by the very considerations that led us to regard the preference of other people's well-being to our own as rational, to treat such a preference on our part as intrinsically better even for ourselves. We have in fact (with Kant) recognised the existence of two *prima facie* rational ends—Virtue and Happiness, the latter being treated as part of the true well-being of man only in so far as is consistent with the predominance of Virtue" (p. 71).

The discussion of Intuitionism (ch. iv.) is excellent, and offers no ground for criticism. An important distinction is drawn between the "intuitive" and the "infallible" character of our moral judgments ("Self-evident truths are not truths which are evident to everybody"); but the summing up of the truth and error in the theory is again significant for the author's own view. "What then is the difference between the intuitions which we have rejected and the intuitions which we have felt ourselves compelled to accept? The intuitions of the Intuitionist are supposed to lay down invariable *rules* of conduct; the *a priori* or immediate judgments which we have admitted relate to *ends*, to the relative value of different

elements in human Well-being or εὐδαιμονία. In other words the intuitions of the Intuitionist disregard consequences; ours relate precisely to the value of different kinds of consequence. The Intuitionist pronounces intuitive judgment upon *acts;* our intuitions relate to *ends;* his take the form 'this is right,' ours always the form 'this is good'. . . . The old intuitive rule of Veracity is supposed to say, 'Do not lie under any circumstances whatever': our judgment of value gives us only 'Truth-speaking is good; lying is bad'. And the moment the intuitive or *a priori* truth is put in this new form, the irrationality and unworkableness of the old intuitional system disappears. We are not forbidden to calculate consequences. Certainly we must trace the bearing of an act upon universal Well-being; but in our εὐδαιμονία truth-speaking, or rather the truth-speaking or truth-loving character, finds a place. . . . It remains true that truth is good, and speaking an untruth an evil; but like other goods, truth may have to give way to greater goods; lying is always an evil, but it may be the less of two evils" (pp. 91, 92). The result of the discussion up to this point is that "the true criterion of Morality is the tendency of an act to promote a Well-being or εὐδαιμονία which includes many other good things besides pleasure, among which Virtue is the greatest. The value of these elements in human life is determined by the Practical Reason intuitively, immediately, or (if we like to say so) *a priori*. All moral judgments are ultimately judgments as to the intrinsic worth or value of some element in consciousness or life" (p. 93).

The idea of Duty thus emerges as the central element or category of the moral consciousness. The author agrees with Sidgwick as to the ultimateness and unanalysableness of the idea of moral obligation. "There is implied in every ethical judgment the idea that there is something which is intrinsically good, which it is reasonable to do, which is right, which ought to be done. These different modes of expression I regard as alternative ways of expressing the same unanalysable idea which is involved in all ethical judgments —as much in the Utilitarian's judgment that he ought to promote the greatest happiness of the greatest number as in the Idealist's judgment 'I ought to aim at the greatest Virtue or Perfection for myself or for others'" (p. 102). The next chapter (v.) is accordingly devoted to an examination of the Kantian theory of Duty, and is entitled "The Categorical Imperative". Though the discussion forms an important stage in the general argument, and contains some excellent statements, it must be said that the chapter, as a whole, is one of the least satisfactory in the ethical part of the work. The criticism of Kant proceeds upon the familiar lines, and is far from convincing. The author holds that Kant "assumed that out of this bare idea of a categorical imperative, without any appeal to experience, he could extract a moral criterion, *i.e.*, that he could ascertain what is the actual content of the Moral Law, what in detail it is right to do" (p. 108). In the idea of duty, according

to Kant, "we are presented with a form which needs no filling up from experience, a form which is (so to speak) its own content" (p. 109). The appeal to experience is "an appeal which our categorical imperative was intended by Kant to exclude" (p. 112). Kant attempted "to extract out of the bare form of the Moral Law a knowledge of the particular actions which are right or wrong" (p. 113). "All his difficulties arose from the attempt to give a meaning to, and to find a content for, this idea of 'right' without appealing to the idea of 'good'" (p. 135). Now it is obvious that the thesis "that without any appeal to experience we can get at the content as well as the form of the moral law, can easily be shown to be a pure delusion" (p. 109); that, in any of its formulations, the categorical imperative "is too vague to be really of any use as a moral criterion without knowledge of a kind which cannot be extracted out of the formula itself" (p. 131); and that "we must cast to the winds the whole of his elaborate attempt to get at the details of conduct without appeal to experience or calculation of consequences, and to exhibit that good will as actuated by the mere form of a universal law without any regard to the content or matter of it" (p. 134). But the previous question remains, whether Kant was in reality the victim of this delusion, whether he did really attempt this impossible feat, and it is difficult to understand how any unbiassed reader of the *Kritik der praktischen Vernunft* could attribute to its author such an absurd position. Take, for example, such a statement as the following: "All the matter of practical rules rests on subjective conditions, which give them only a conditional universality (in case I *desire* this or that, what I must do in order to obtain it), and they all turn on the principle of *private happiness*. Now, it is indeed undeniable that every volition must have an object, and, therefore, a matter; but it does not follow that this is the determining principle, and the condition of the maxim. . . . Thus the happiness of others may be the object of the will of a rational being. . . . The matter then of the maxim may remain, but it must not be the condition of it, else the maxim could not be fit for a law" (Abbott's transl., p. 123). The categorical imperative does not itself suggest specific courses of conduct; it is not the criterion which determines right conduct in detail, or tells us *what* we ought to do. It merely decides whether a given course of conduct is fit to be pursued by a moral agent, or *how* we ought to act. It determines the spirit of right action, the true relation of reason to sensibility; but that it presupposes an empirically determined situation is evident from all the illustrations given by Kant himself. It is preposterous to say, as Mr. Rashdall does, speaking of the Caliph Omar's order that the books in the Alexandrian library should be burned, that "the consistent Kantian, *i.e.*, a disciple of Kant in his most logical but least rational moments, ought to be able to say whether they should be burned without knowing what sort of books they were or even that they were books

at all" (p. 137). Nor is it easy to comprehend how he allows himself to say that "Kant nowhere explains the relation in which the three rules [or statements of the categorical imperative] are supposed to stand towards one another" (p. 109, footnote).

Yet the contribution which the Kantian theory of duty makes to a sound ethical theory is admirably stated in the concluding pages of the chapter. "Love of any particular good object is always liable to interfere with the promotion of some other, and, it may be, more important good. . . . Now duty means, as we have seen, precisely devotion to the various kinds of good in proportion to their relative value and importance. No one then can be trusted at all times and in all circumstances to attribute to each good precisely its proper degree of worth in whom there is not strong devotion to that supreme good in which all others are summed up. It is not necessary that a man should make the sense of duty the sole motive of all his conduct, provided it is always ready to inhibit an action the moment he sees any reason for believing that it is contrary to his duty" (pp. 125, 126). "Goodness in the narrower moral sense —the right direction of the will—is itself the greatest of goods, and must always be paramount in the ideal man; but the ideal man will care about many other things besides the right direction of his own and other people's wills—knowledge, beauty, particular persons, social intercourse, various pleasures in proportion to their intrinsic value. It is scarcely possible that he should acquire this habitual right direction of the will without more or less consciously thinking of it; but, in so far as he does come to love the things prescribed by Reason, respect for duty as such will tend to pass into a sense of the relative value of the goods which he loves, and to lose that abstractness, and also that sense of constraint and obligation, which are elements in the sense of duty as understood by Kant and his followers. At bottom the sense of duty is the due appreciation of the proportionate objective value of ends. In this sense alone is the 'feeling of obligation' an ultimate and indispensable element of the moral consciousness" (p. 128).

The exaggeration of the rationalistic element in the moral consciousness leads to the "moral sense" or "conscience" theory of ethics, which is carefully examined in chapter vi., "Reason and Feeling," in which the failure of the moralists of this school to account for the objective significance of our moral judgments, as well as the inadequacy of the theory to account for the actual content of these judgments, are clearly shown. "When certain states of feeling appear to be selected for approval or condemnation by a kind of instinct which can give no further account of itself, these are, in so far as they persist after the fullest reflexion, not merely isolated feelings of approval or disapprobation such as the deliverances of the Moral Sense are sometimes supposed to be, but feelings which are elements in a single, interconnected, articulated ideal of human life" (pp. 157, 158). The author adds an instructive Note

on the Æsthetic Judgment, bringing out the parallel between it and the moral judgment.

It is only possible to call attention to the important chapters on "Justice" and "Punishment and Forgiveness," with which Book i. closes, and to the excellent account given of "Vocation" and "Moral Authority and Moral Autonomy," in chapters iv. and v. of Book ii. My reasons for not following the author into the metaphysical discussions of Book iii. have been already indicated; I should like, however, to acknowledge the merits of the discussion of the Evolutionary theory of Ethics in chapter iv.

Dr. Rashdall's interpretation of Kant has been challenged earlier in this notice. I cannot close it without a reference to two other cases of doubtful interpretation of important ethical positions. We are told (vol. ii., p. 74) that Plato, "while recognising the moral usefulness of the combative instinct (*τὸ θυμοειδες*) as the ally of Reason against the lower passions, did not see that these too were capable of being, and ought to be in various degrees, educated and guided by Reason, instead of being merely crushed and suppressed". How can this doctrine of the "suppression" of "the lower passions" be reconciled with the Platonic idea of justice or complete virtue as consisting in "the doing of its own proper work by each of the inward faculties"? Again, the author says that Aristotle "assumed that the imperfectly virtuous acts by which the habit of virtuous action was formed would be done from some non-moral motive. How the repetition of a series of acts influenced by *wholly* non-moral motives would result in a habit of acting from moral motives, of doing the virtuous act for its own sake, is never satisfactorily explained; that is the great hiatus of Aristotle's ethical system" (vol. ii., p. 79). But did not Aristotle believe in degrees of virtue, and hold that "imperfectly virtuous acts" were done not from "*wholly* non-moral motives" but from motives *incompletely* moral or rational?

JAMES SETH.

Pragmatism, a new name for some old ways of thinking:[1] *Popular Lectures on Philosophy.* By WILLIAM JAMES. Longmans, Green & Co., London, New York, Bombay and Calcutta, 1907 Pp. xiii, 307.

THE readers of MIND will hardly expect from the present reviewer anything else than whole-hearted appreciation of one who is avowedly his leader. But the distances of a far-extended battlefield may at times compel the most loyal lieutenant to take upon himself the

[1] A Review of Prof. James's *Pragmatism* from a different standpoint will appear in the next number of MIND.—EDITOR.

responsibilities and risks of an independent initiative, while the choice of tactics naturally depends somewhat on the requirements of the controversial situation. It may, therefore, add to the interest and conduce to the clearing up of this situation to consider in this review (I.) how far the methods of Prof. James's book are suited to the rigours of our philosophic climate, (II.) what are the novelties which it contributes to the growth of Pragmatism and what is their significance, and (III.) whether Prof. James anywhere takes up positions into which his adherents may hesitate to follow him.

I. As is avowed in the title and as befits Lowell Lectures, Prof. James's book is thoroughly popular, in the best sense of the term. It is, in other words, a book which all can understand, and all but the most fanatical of intellectualists can enjoy. On both these grounds it is a book which no educated man should fail to read. It is popular in the sense of being lucid and well-written and well-composed. It never long pursues an abstract train of thought without illuminating it with concrete illustrations and relieving it with delicate touches of humour. It always approaches the steeper portions of its route by a series of most subtly graduated steps. But it is emphatically *not* popular in the sense of using unsound arguments or of failing to drive its point home. Hence it forms probably the best book ever written for the purpose of arousing interest in philosophic questions. And yet its culminating portion (the sixth and seventh lectures) really forms a most masterly exposition of what was (until now) perhaps the obscurest and most difficult aspect of the Pragmatist position, and gives the completest reply to most of the stock objections.

Prof. James's method, however, is by no means controversial, and so is the better adjusted both to the American taste and to the American situation. For though in that country the rise of Pragmatism has been attended by vast clouds of criticism, this polemic has always been of a curiously loose and general character. Hence only those who have followed the controversy very closely will fully appreciate how urbanely Prof. James disposes of misrepresentations, how deftly his rapier punctures wind-bags and how gracefully he evades the air-beating of stationary windmills in his almost quixotic crusade against intellectualism. How for example could the idolatry of abstractions be either hit off or shown up more happily than by this quotation from the "biography of an eminently rationalistic mind"? "It was strange that with such admiration for beauty in the abstract, my brother had no enthusiasm for fine architecture, for beautiful paintings, or for flowers" (p. 229).

II. But of course Prof. James is well aware that the struggle between intellectualism and humanism must be decided by the closest and most strenuous reasoning, and accordingly he propounds a number of new and weighty arguments, of which the following seem particularly worthy of attention.

(1) He makes it abundantly plain that the pragmatic objection

to the 'copy' or 'correspondence' view of truth refers *only* to the alleged relation of truth to a *transcendent* original, and that there are plenty of 'copyings' and 'correspondences' *within our experience*, which are pragmatically unexceptionable. This is not perhaps an advance on Prof. Dewey's original intention, but it is an important service to have it made quite obvious that truth cannot depend on any but immanent 'agreements,' and that no appeal to 'correspondences' or 'agreements' which are *immanent* can possibly form a defence of the *transcendent* correspondences which both the realist and the absolutist positions have been found to involve.

(2) Prof. James has advanced beyond any other pragmatic writer up to date in illustrating and explaining how Pragmatism conceives the condition of *potential truth*, truth, that is, which is not in use, but merely stored up in the mind as a reserve wherewith to meet the situations which emerge in our life. It would appear that just as objects of sense-perception are never wholly perceived at any one moment, so in the whole body of Truth as it exists at any time for any mind only a small part is actually undergoing verification at any one time. The rest remains *verifiable* and may be called potentially 'true'.

It is easy to see what a light this throws on the origin of the disagreement between the rationalist and the pragmatist. The former regards the 'potential' condition as the proper, normal and typical condition for a 'truth' to be in: the latter protests against such an abstraction from purpose and insists that when we put a truth into "cold-storage in the encyclopedia" we do so with the intention of taking it out again and using it, contending that no truth can be thus stored up indefinitely without undergoing deterioration. It is expedient, he would say, that potential truths should still rank as 'true' even when they have joined the reserves; but they do not really remain efficient or 'verifiable,' unless they are from time to time called out for active service.

On the other hand there is no essential connexion between verifiability and verification for what one would like to call the rationalistic theory of Truth, if only it were more than an attempt to deny the pragmatic interpretation of the common-sense notions on the subject. Hence it follows that on this theory the existence of *unverifiable* truth must be conceded, and even insisted on. This again will be found to imply the assertion of sundry unknowables and possibly other still more bizarre consequences, which need not now be dwelt on.

Rationalism, however, is apparently still in blissful ignorance of any such logical implications of its standpoint. Nay, it actually professes to believe that Pragmatism is not entitled to speak of verifiable truths![1] The reply to such contentions need hardly go beyond a reference to Aristotle's *Metaphysics* Θ. 3, which may also suggest

[1] *Cf.* the *Journal of Philosophy*, iv., 12.

the probability that such 'Megarianism' must end in the very 'Protagorean' perplexities which were alleged against the pragmatist.

Prof. James's way of posing his rationalistic critics, however, is simply to ask them how (apart from pragmatic motives) they can ever take a forward step in actual thinking and select out of the body of verifiable truths those which are actually asserted. "When shall I acknowledge this truth and when that? Shall the acknowledgment be loud—or silent? If sometimes loud, and sometimes silent, which *now?* When may a truth go into cold storage in the encyclopedia? and when shall it come out for battle? Must I constantly be repeating the truth 'twice two are four' because of its eternal claim on recognition? or is it sometimes irrelevant?" (p. 231).

(3) In illustration of the Pragmatic Method Prof. James adds considerably to the hints he has elsewhere given about his metaphysics. He shows that 'God,' 'freedom,' 'design' and 'pluralism' are all to be understood as pragmatic conceptions, and it ought to make monistic fanaticism thoroughly ashamed of itself to find how clearly Prof. James has been driven into 'pluralism' by the flimsiness of its arguments, and how easily and advantageously the notion of the Ultimate can be substituted for that of the Absolute (p. 159).

(4) It is clear, therefore, that Prof. James nowhere withdraws from any of the positions he has occupied, though he would doubtless think it churlish to grudge Intellectualism whatever consolation it may be able to derive from the fact that he freely speaks of 'theoretic' interests. But this is not a concession so much as an example of the psychological generosity of statement so habitual in him, which leads him always to view his opponent's position from the inside. For in the mouth of a pragmatist 'theoretic' interests are not, of course, things exalted above all relation to other human purposes. They are either individual fads or social recreations or in some other indirect way connected with the vital functions of society, and the only objection to the word 'theoretic' is that it may mislead those who use it into the false abstractions which divide the mind into a number of 'independent' 'faculties'. Still, if it is a comfort to any philosopher to continue to speak of purely 'theoretic' truths, there is no pragmatic reason why they should be tabooed, provided that their nature is thoroughly understood.

III. Prof. James shows this pragmatic toleration very finely also in his dealings with the religious aspects of Absolutism. He takes it as one of three great types of 'Weltanschauung' (the other two being the naturalistic and the pragmatic), which is intrinsically 'tender-minded' and monistic, and he strongly suggests that which of these three a man will adopt will depend ultimately on his own temperament. In both these contentions Prof. James is doubtless right, though he may be thought at times to overstate the pragmatic value of 'the Absolute'.

For example it is all very fine to depict the consolations of religious monism with such eloquence as this—"all are one with God

and with God all is well. The everlasting arms are beneath, whether in the world of finite appearance you seem to fail or to succeed"—and generously to admit that Absolutism is pragmatically true because it works religiously and that "when men are reduced to their last sick extremity absolutism is the only saving scheme" (pp. 292-93). And psychologically no doubt this is what many often feel. But what about the logical grounds of this feeling? What if it does not really save, but only seems to? What if doubts arise *within* this scheme of thought? What if it is doubted whether the One is 'God' any more than 'Devil,' 'spirit' as much as 'matter,' and whether it can secure its own reality except by the sacrifice and annihilation of all 'finite' appearance? After all there is a short and broad way from every monism to materialism or illusionism, as the history of all monistic systems shows. Where are the consolations of Absolutism then? Surely before we can be called upon to drug ourselves with them, it should be shown that they are rational and possible inferences from absolutist principles. Surely what is called in question nowadays is whether in the last resort Absolutism has the 'definite meaning' and religious value it pretends to, nay whether ultimately it means anything at all. But what proof of any of its cardinal assertions has ever been forthcoming?

The truth is that just as absolutist epistemology is cleft by a chasm which it recognises as 'the problem of Error,' so absolutist 'theology' is fissured by 'the problem of Evil,' and that the more Absolutism tries to reduce the one to the other the clearer it becomes that the other shatters its system. Either Error or Evil (and *a fortiori* both) are fatal to every absolutism. In practice no doubt it is true that monists bridge the gap by a mystic act of faith, and grasp the 'infinite' without abandoning the 'finite'. But this merely shows that in ultimate analysis Absolutism is a far more pronounced and desperate form of faith-philosophy than any Pragmatism which insists that the postulates of our faith must be verified before they can rank as fully true.

Similarly as regards the temperamental influence on philosophic options. That in view of the historic facts its existence must be admitted is plain—there is no other way of vindicating the sanity of philosophy in the eyes of men. There comes a point, no doubt, in all the great philosophic controversies, when both alternatives are seen to rest on sheer subjective choices which determine the whole course of the subsequent contentions. But this point has hardly yet been reached in the controversy between Absolutism and Humanism. The arguments of neither have yet been carried to their logical limits, and much 'skri' has still to be wearily traversed before the watershed is reached and the bloodshed can cease. It may be predicted also that when the logical implications of consistent and complete intellectualism are fully developed, it will lose its attractiveness to all but a very few minds.

It seems therefore somewhat surprising to find Prof. James con-

trasting the stability of the intellectualist's view with the 'restlessness' of the pragmatist's (p. 277), and describing him as "a happy-go-lucky anarchistic sort of creature" (p. 259). For close inspection shows that the steadfastness of the former is that of one stuck in a bog, while the mobility of the latter is that of one who has learnt to swim. It is true no doubt that until recently the expositions of the Pragmatic Method were of a very general and sweeping character. But the reason was simply that the reigning intellectualism had become so stagnant and intolerant that the right to be heard could be extorted from it only at the point of the sword. Hence it was necessary to postpone the application of pragmatic methods to the details of philosophic problems. But by this time it is plain that the pragmatic school has established itself all the world over and that it can more and more apply itself to the solution of outstanding problems. Moreover this was what it really aimed at all along, and what its criticisms really demanded.

When, for example, it inquired of intellectualism how it conceived the bearing of psychology on logic, of desires and interests on thought, of 'will' on 'reason,' how it found room for human purposes in its scheme, how it discriminated between 'true' and 'false' and what it took 'truth' to mean, how it related 'truth' to the 'good' and the 'real,' how it conceived the relations of 'reason' and 'faith' and the solution of cognitive problems, why it assumed associationism and apriorism to be the sole epistemological alternatives, how it deduced the Many from the One, or rose to the One from the Many, how it connected our truth with absolute, etc., what were these pragmatic questions doing but trying to develop perfectly definite and specific problems which intellectualism had been compelled to leave unsolved? Surely, if intellectualism were really the complete, noble, clean, rigorous system it popularly professes to be, is it likely that any one should have taken the trouble and incurred the obloquy of impugning it? In point of fact every fresh question which is raised on the pragmatist side reveals further incoherences in the ideal of 'coherence' and further confusions in those who cherish it.

And what after all is the position in which 2,000 years of intellectualism have left philosophy! Philosophy is reduced to the position of a common scold among the sciences, whose 'reflections' are mere vituperations which are ignored by the sciences it impotently rails at; it is hopelessly divorced from life, despised by men or suspected of secretly pandering to scepticism, alienated from religion, constitutionally incapable alike of advancing knowledge and of guiding conduct, helpless not only to realise its own ideals, but even to state them precisely and coherently. In short is it not baffled in all its undertakings and in every way discredited and dishonoured? Nay, in what respect does it really stand higher than in the days when Plato, the great systematiser of intellectualism, first deplored its status? The general endowment of education has no doubt resulted in the establishment of a number of professors of philosophy (*cf.* p. 100). But

these posts are possibly of greater benefit to the professors than to their subject, and it is to be feared that Plato, could he see them, would be as little impressed by them as by the 'bald-headed little tinker' of the *Republic*.

If such are the fruits of the *ancien régime*, what more can be feared from anarchy and revolution? But is it anarchical to declare that each man has the right, and the duty, to interpret his own experience, and to construct a philosophy adequate to that? Is it not rather a tardy recognition of human freedom and responsibility? And could it possibly seem anarchy to those who have fully grasped man's social nature and his desire (in philosophy also) to co-operate with others and to discover or devise a ground for common action? Surely, these are the fears of minds who either have the passion for obscurity or despair of rendering their pet convictions anything more than the esoteric doctrine of a few. It is impossible to believe that Prof. James really agrees with them (*cf.* pp. 51, 123): he has once more chivalrously understated his own case in the language of others, out of psychologic courtesy.

One more regret, and this review may close. It seems a pity that Prof. James does not employ the convenient distinction between 'making' and 'creating' truth. For the latter word suggests (what is of course sheer misconception and absurdity) that Pragmatism professes to describe the creation of truth out of nothing. Whereas of course creation out of nothing is no more observable by us here than anywhere else. But such things are, like the spots in the sun, merely enhancements of Prof. James's steady brilliance.

F. C. S. Schiller.

VII.—NEW BOOKS.

Lectures on Humanism with Special Reference to its Bearings on Sociology. By J. S. Mackenzie. London: Swan Sonnenschein; New York: The Macmillan Co., 1907. Pp. vii, 243.

Prof. Mackenzie's amiable, readable and interesting little book, composed of lectures delivered last year at Manchester College in Oxford, is hardly intended to be taken too seriously as a contribution to the very equivocal and ill-defined science yclept sociology, and it is much too popular, tentative and apologetic to contain anything much for the fiercest critic to fall foul of. Unfortunately, however, it also illustrates a chronic and apparently incurable failing of the philosophic intellect. Why is it that philosophers will not consent to keep to one definite meaning for their technical terms? Why do they insist on using them all in several senses? Why is it that a philosopher has no sooner tried to fix a definition for a term than the next one comes along and uses it in some other sense, near enough to be confused with the first and different enough to vitiate the arguments of both? In the other sciences respect for the sacredness of technical meanings is one of the first obligations inculcated on the student and constitutes a motive which only urgent scientific necessity and due notice avail to set aside. It is a curious fact, for which no reason is forthcoming, that this has never been the practice in philosophy.

And so one could not censure Prof. Mackenzie, if only he had succeeded in rendering clear the sense in which he proposes to use the new term 'humanism' and in showing that it can be usefully applied to the classification of philosophies. But in both these respects his reader has much difficulty in following his argument. He begins (p. 2) by contrasting humanism with 'naturalism' and describing it as "a point of view from which human life is regarded as an independent centre of interest". But of what philosophy could not as much be said? Certainly the crassest naturalism and the wildest supernaturalism are in some sense and degree interested in man, while the word 'independent' is far too ambiguous to limit the meaning. Prof. Mackenzie subsequently suggests that humanism is antithetical also to supernaturalism (pp. 12, 159, etc.), and that the fundamental idea of humanism may be taken to be that of end or purpose (p. 55). If so, he should surely have worked out precisely the implications of a consistently teleological view of the universe, and made it into his criterion for discriminating between genuine humanism and its mimics. As it is, he leaves a fundamental vagueness about his conception, and gets involved in endless difficulties. There is hardly a statement in his book, either about humanism in general or about the humanistic character of any historical philosophy in particular, which has not to be subjected to reservations or restrictions which often amount to its practical withdrawal. In the end we are told, *e.g.*, "that it seems clear that the opposition between supernaturalism, naturalism and hu-

manism cannot be accepted as an absolute one" (p. 160), and that the most adequate form of humanism holds that "the world is to be regarded as having a certain reality and importance of its own, but must ultimately be interpreted in relation to human life" (p. 187). It becomes necessary, therefore, to admit that "in this sense the term almost loses its more specific meaning," and "almost ceases to be opposed to naturalism," and that "we cannot really make any sharp distinction" between different forms of humanism; nor (we may add) of anything whatsoever. In short one constantly feels the need of clear-cut conceptions which are really applicable to the situation and can be consistently carried through.

When he comes to apply his notion of 'humanism' to the historical systems of philosophers, Prof. Mackenzie fares no better. Expressly and by implication nearly every philosopher exhibits at least "a thin vein of humanism" to his sympathetic imagination. But then *per contra* he can find no one (not even himself!) in whom the humanism is pure and unalloyed. The treatment of Spinoza may be taken as typical. On page 10 we are told that his demand that human life should be studied just as if it were a circle or a triangle is naturalistic. But it is at once suggested in a footnote that though this implies an absence of teleology, it is chiefly a demand for the 'dispassionateness' of mathematics. As if 'dispassionateness' and devotion to geometry were not both intensely human ideals, despite their pretty obvious inability to cover *all* the spheres of human interest! On page 40 it is suggested, however, that Spinoza "to a very large extent anticipates the humanism of the later German idealists, just as Berkeley does, but in an even more remarkable degree," but that "this element cannot be reconciled with the purely logical development" of his system. Lastly, on page 31, the secret of Spinoza appears to be that "it would perhaps be truest to say that he is a humanist who habitually expresses himself in the language either of naturalism or of supernaturalism"! The classifications of Plato, Aristotle, Descartes, Berkeley, Bentham and others similarly go astray.

Again, when it is applied to the questions actually under discussion at the present day, Prof. Mackenzie's 'humanism' speaks with a most uncertain sound. Not that his last lecture does not contain some decidedly suggestive remarks about teleology, time, evil, ultimate reality, etc. But they leave things pretty much as they were, and betoken an uncertainty which seems to be subjective in the author as well objective in his dicta.

Now is not all this very inconvenient? What has Prof. Mackenzie gained by so extending the technical use of 'humanism'?[1] Nothing, I fear, to counterbalance the damage he inflicts on the cause of clear thinking. Moreover his policy would seem to entail two grave disadvantages upon himself. His doctrine is sure to be confounded with that of humanists whose standpoint is more clear-cut, if less inclusive, than his own. And he is sure to be charged with attempting to steal their thunder. Neither result will be either welcome or just to Prof. Mackenzie, I should suppose. But was it necessary to incur them?

It seems a mistake, then, to try to make 'humanism' too inclusive. It excludes Naturalism on the one side, doubtless, at least as definitely as Prof. Mackenzie supposes. But it, quite as clearly, excludes Absolutism on the other. And this he has slurred over or failed to observe. It is, however, very important that there should be no mistake either

[1] His historical *right* to do so is not of course to be questioned. For the term was used as a philosophic description in this very journal some years before any attempt was made to define by it the generalisation of pragmatism.

about the fact, or about the grounds, of this exclusion. They are essentially humanistic, and form the essence of Humanism. Just because Humanism centres human interests in man, it must oppose a doctrine which regards man as an insignificant derivative from an Absolute which could dispense with humanity and so cannot, in the end, remain related to it. Just because Humanism is fundamentally teleological, it cannot in principle accept Absolutes which cannot be conceived as aiming at ends and exhibiting intelligence by choosing means. This is a perfectly clear issue. It means that Humanism *must* reject Absolutism because it cannot tolerate any dehumanising of the world which renders it impenetrable to our intelligence. Hence Humanism cannot think it an essential difference that the being which renders all human life and effort nugatory and unmeaning should be conceived, now as infra-human, now as supra-human. Now it is quite true that few absolutisms contemplate from the first the utter alienation from all human interests to which they are logically driven at the last. But while recognising this, Humanism insists that the consequences of Absolutism shall be thought out to the bitter end. For good intentions can hardly palliate bad logic, even in a rationalist's philosophy. The issue, at any rate, should be fairly faced. Let Prof. Mackenzie (or whoever else feels a vocation) construct, if he can, an Absolute which can have a purpose, and can really be related to man, or have any bearing on any human interest; and then, if he succeeds, he will find Humanism ready to welcome him. But until he has accomplished this, let not Humanism and Absolutism be spoken of in the same breath. Surely the challenge of Humanism has become so plain and clear that it is idle to ignore it.

A word of sincere appreciation, however, may fitly conclude this notice. Prof. Mackenzie has done good service by vindicating for philosophy the use of the term 'humanism,' and by ably exposing the absurdity of confining it to the literary reaction against medieval scholasticism. The scholars of the Renaissance were, no doubt, true Humanists (in the philosophic sense) so long as they were liberating human thought from the fetters of a pedantic theology. But they speedily evolved a new pedantry of their own, and their services scarcely justify the grotesque exaltation of pedantry which would restrict 'humanism' to the study of classical literature, or even, as Prof. Mackenzie well points out, in the tradition of the Scottish Universities, reduces the study of 'Humanity' to that of Latin!

F. C. S. Schiller.

Hypnotism, or Suggestion and Psychotherapy: A study of the Psychological Psycho-physiological and Therapeutic Aspects of Hypnotism. By August Forel, M.D., D.Phil. et Jur., Chigny, Switzerland. Translated by H. W. Armit, M.R.C.S., L.R.C.P. London and New York: Rebman, Limited. Pp. xii, 370.

This is a translation of the fifth German edition of Dr. August Forel's *Hypnotism*. The first edition appeared in 1889, when as yet the use of hypnotism by medical men had not become a commonplace; the fifth edition appeared in 1905, and it contains a fair representation of all the leading discussions in the interval. In the first and second chapters, the author aims at placing his subject under large philosophical generalities. The standpoint is represented by: "Every purely psychological phenomenon possesses its physiological side—the movement of a material element in the brain. In one word, nothing is psychical without being at the same time physical, and, if we could observe the non-ego we should,

in all probability, find that in the same way nothing can be physical without being psychical" (p. 16).

Dr. Forel accepts Semon's theory of the mneme, the essence of which is that the susceptible substance of the organism is, before stimulation, in a state of primary indifference; after stimulation, in a state of secondary indifference. "If, after the stimulus has ceased, the susceptible substance of the living organism in the condition of secondary indifference shows permanent changes, Semon calls the action 'engraphic'. The change itself he calls 'engram'. The sum total, not only of the inherited, but also of the individually acquired engrams of a living being he calls its 'mneme'" (p. 4). The term 'ecphoria' includes the reproduction of the organic excitement and covers association, memory, "the physiological conditions of automatism, ontogenesis, phylogenesis, which are all psychologically recognised as introspective processes. Engrams are, therefore, ecphorised." This is another, and not inconvenient, way of figuring the well-known facts of organic memory. Other terms frequently used through the exposition are 'superconceived,' 'hypoconceived,' 'super-consciousness,' 'hypo-consciousness'. The term hypoconception covers such things as the dim consciousness of individual letters after one has acquired skill in reading. Of this the degree varies down to blank unconsciousness. The term is convenient. (Incidentally, one notes the unusual phrase "law of the preservation of energy," instead of "the conservation of energy," which is now the accepted English phrase. But the translation, though frequently yielding to German idiom, on the whole satisfactorily renders the original.) The author's views of perception, memory, and double consciousness, contain little that is not generally accepted; but the exposition is somewhat mixed up with general philosophical questions. In chapter ii., he goes somewhat more into detail regarding the relation of nerve activity to nerve substance and the conditions of consciousness. He gives considerable detail of the neuron and its activities. Semon's terminology (mneme, engram, etc.) is convenient for indicating complex results of stimulation, *e.g.*, hallucination. Chapter iii. contains some historical facts on hypnotism, and discusses the Nancy theory of suggestion *versus* Charcot's. The criticism of the Charcot school is much to the purpose, although it is tinged with needless emotion. He regards Charcot's distinction of somatic and psychical as inconvenient, since all the conditions of consciousness are both somatic and psychical. Hysterical persons are unreliable and the most delicate, because the most unconscious, malingerers and comedians. They apperceive delicately by the senses and have at the same time very plastic imaginations, being thus at once suggestible and abnormally auto-suggestible. They are also inclined to catalepsy, lethargy and to fits (p. 61). On these grounds he maintains that Charcot's apparently constant sequence of stages was really due to hypnotic suggestion in hysterical cases, that is, they were really artificial creations, not true symptoms. Hence he does not allow that hypnosis is a neurosis. The Charcot school itself would now admit part of this criticism. At any rate, they would not dispute the range of suggestion. Chapter iv. enters into further detail about suggestion. The processes used and their applications are sufficiently described. Some excellent cases are given to indicate the conditions of amnesia, dissociation, negative hallucination, auto-suggestion, post-hypnotic suggestion, suggestion as to time, lasting results of suggestion, falsification of memory, etc. The historical case of Gottfried Keller is retold. It throws a keen light on the so-called lies of children. The author also discusses Vogt's views and pedagogical applications. This chapter runs to 125 pages and is the most important in the book. Chapter v. discusses suggestion and dis-

orders of the mind, including hysteria. "Hysteria is not a completely circumscribed clinical picture, but is a pathological symptom-complex or syndrome. The symptom-complex may be constitutional, or, more rarely, acquired; but both factors are not infrequently combined. This symptom-complex is characterised especially by a pathological dissociability (suggestibility and auto-suggestibility) in which the auto-suggestibility preponderates in the severer and more markedly constitutional cases. It is combined under numerous conditions with every form of psychopathic conditions" (p. 95). There follows a discussion of hysteria and the effect of hypnosis. Incidentally, the author declares that "we have never met with a single case of serious or lasting damage to the mental or bodily health, but have observed very many cures and improvements in illnesses in persons whom we have treated" (p. 197). Chapter vi. contains hints to the practitioner of suggestive treatment. These hints all bear the mark of careful and extended experiment. Many indications are given of types of disease successfully treated. Chapters vii. and viii. continue the same subject. These and the remainder of the book are almost entirely medical. Chapter ix. contains a very strong case of retrogressive amnesia, with protracted somnolence, analysed and cured by suggestion. This case deserves careful study. Chapter x. deals with a case of double consciousness. Chapter xi. discusses the question of the relation of hypnotism to medicine. There are some indications of a tendency to depreciate drugs unnecessarily; but on the whole the discussion remains scientific. Chapter xii. deals with the forensic aspects of suggestion. Chapters xiii. to xv. are somewhat in the nature of appendices on particular points. There is a short, but serviceable, index. The book is fully loaded with concrete material, and should become an excellent companion to any medical practitioner that wishes guidance in hypnotism. Incidentally, it offers some raw material for the psychologist as such.

W. Leslie Mackenzie.

First Steps in Mental Growth: a Series of Studies in the Psychology of Infancy. By D. R. Major. New York: The Macmillan Co., 1906. Pp. xiv, 360.

The psychological study of childhood may be said to have passed through three developmental stages. First of all came the detailed description of the growth of the individual child: Preyer's classical work is, of course, the typical instance of this sort of work. There followed the period of generalisation, in which the separate life-histories of individual children were compared, with a view to the discovery of general laws: Sully's *Studies in Childhood* may be taken as an illustration. The third level is reached when child-study becomes explanatory, when its problems are formulated in scientific terms and approached by scientific methods: here belongs the best work of contemporary German investigators.

Prof. Major's book is based upon a record kept of his son from birth to the end of the third year. "Whatever interest or value the work may have must lie, mainly, in the record stripped of all theory and interpretation beyond what has been absolutely necessary for the presentation of a faithful narrative." In essentials, then, the work represents the first of the three stages just distinguished. This self-imposed restriction of the author's task is regrettable, since he might have turned his psychological knowledge and training to good account upon the generalising level (*e.g.*, in a recasting of the psychological categories whose rigidity and insufficiency he more than once deplores), to say nothing of the further

work of explanation. Indeed, had he sought his parallels and confirmatory observations beyond the limits of the English language, he could hardly have failed to become interested in questions which he now passes without mention.

If, however, we look at what Prof. Major has done, rather than at what, in the present state of our knowledge, he might have done, the book must be given hearty commendation. Especially valuable are the chapters on the development of movements of hand and arm, on drawing, on the feelings and their expression, on the development of imitation, and on language. It is characteristic of the author's care and thoroughness that he distinguishes no less than fourteen stages in the process of the acquisition of language. There can be no doubt that "the data thus furnished will be of use to psychologists who may be engaged in the formulation of a theory of mental development".

P. E. WINTER.

Practical Health. By LEANDER EDMUND WHIPPLE. New York: The Metaphysical Publishing Co., 1907. Pp. vi, 316. Price $1.50 net.

Mr. Whipple's special claim to distinction among "Mental Healers" is, it appears, his "Specific Image Treatment". Although a broad, general basis of health may be acquired along with "the general principles of metaphysical philosophy," extreme cases of disease require this "Specific Image Treatment," which consists in finding out "what particular thought-element the disease agrees with" and "establishing its opposite". The results achieved are said to be in the highest degree satisfactory, although the cases given do not seem to me very convincing. The whole science of mental healing, Mr. Whipple claims, is based on "a strictly spiritual philosophy of existence, involving a deep metaphysical process of reasoning and use of the thinking-powers". It is, beyond doubt, the poor and despised relation of highly esteemed philosophies. When Mr. Whipple says, "The real universe is composed of ideas. The *activity* of its 'ideas' is the *substance* of its 'things'"; when he rings the changes on health, and wholeness, and unity, and denies that things that change are actually real (pp. 174-5), we are reminded of certain aristocratic systems that never dreamed they could be made use of in any form, far less employed as a specific against diarrhœa. If Prof. James ever looks into this kind of literature, he can easily convince himself that Monism can have considerable Pragmatic significance. Nor must the upholders of Psychophysical Parallelism adopt too superior a tone towards what appears to be the practical application of their theory. I would not be understood as merely making fun of Mr. Whipple. Occasionally I think him a little absurd, as when he makes mice die because those who experimented with them were thinking of certain diseases, and not because the bacteria of these diseases were introduced into the animals' systems; but I think he has considerable empirical data on which to base his hypothesis, and that the practices he recommends do as a whole make for health. Health undoubtedly "results from the thinking of right ideas" to no small extent. Mr. Whipple's book is not to me exactly inspiring, but the reading of it can do no one any harm, and it is full of good advice from which one might profit.

D. M.

Biographic Clinics (Vols. iv. and v.): *Essays concerning the Influence of Visual Function, Pathologic and Physiologic, upon the Health of Patients.* By G. M. Gould. Philadelphia: P. Blakiston's Son & Co., 1906, 1907. Pp. 375, 399.

In notices of the first three volumes of these *Clinics* (Mind, xiii., 130, 432; xv., 271) the present writer has expressed the opinion that Dr. Gould has, in general, made out his case. The contention is, it will be remembered, that a good proportion of the nervous and especially the dyspeptic troubles to which civilised flesh is heir may be ascribed in the last resort to unrelieved eye-strain. The evidence which Dr. Gould adduces is derived in part from the life-histories of men distinguished in letters or science, and in part from current ophthalmological experience.

The present volumes bring further evidence of both kinds. In volume iv. we have studies of Balzac, Tchaikovsky, Flaubert, Hearn and Berlioz. The remainder of this volume, and the whole of volume v., are occupied with articles—constructive, critical and controversial—of a more technical sort. It is unnecessary to discuss them in detail. It may be noted, however, as a point of special interest, that the main sources of suicide are found by the author in venereal disease and the systemic effects of eye-strain. He is, perhaps, inclined to underestimate the force of heredity, and does not appear to have followed the recent advances in knowledge due to the application of biometrical methods.

E. B. T.

Esquisse d'Évolution Solidariste. Par Georges Kurnatowski. Paris: Marcel Rivière, 1907. Pp. 95. Price 2fr. 50c.

For this author history is nothing but a concatenation of successive emancipations to culminate in the complete liberty of the individual from all but self-coercion, and his present thesis is that Solidarity brings us nearer this goal than Socialism, of which he is a kindly but severe critic. He believes that many agencies will increase the class of autonomous producers, especially that electricity, delivered as a motive power to the home of the workman, will decentralise manufacture, thus doing away with the organised mass of workmen crowded round the machine driven by steam, which, he thinks, obsesses the constructive imagination of socialists. Their organisation of labour threatens to be the death-blow of individual liberty, but electricity will offer the means for a more effective synthesis of the collective and the individual spirit. Thus accepting the ideal of Anarchism, he prefers to call the result at which he aims Absolute Individualism, because he rejects the methods of Anarchism and insists upon the element of self-coercion. The growing solidarity of citizens and nations is a fact and the inevitable expression of the developing social consciousness. Already Peace is assured between countries republican in essence, and the peaceful federation of Europe is only hindered by certain despotic governments which will yet involve Europe in a final terrific conflict. Although relatively very weak in construction, this little book is worth reading. It is the work of a sensible, thoughtful man, and one remarkably free from prejudice. He has no idea that the absolutely free individual suffices for himself. He submits himself naturally to superior knowledge, and follows the direction of the most intelligent and noble characters, whose right it is to govern, and whose directions of themselves will ensure the obedience they deserve. A great ideal truly, but one wonders what is to effect the great change in human

nature which will ensure its realisation. Something more than electricity seems to be required.

D. M.

Les Raisons du Cœur. Edouard Schneider. Paris ; E. Sansot et Cie., 1907. Pp. 288.

This book, although inferior in every way, is in much the same category as Tolstoi's account of his Religion, and explains how the author comes to accept the Christian revelation while separating himself from the Roman Catholic Confession, in which he was brought up, as well as from Protestantism. Full of doubts and repelled by the mere intellectualism of philosophy, he was driven back upon introspection which revealed to him results so delicate as to defy translation into the precision of intellectual language. He discovered that psychical truth, moral truth, religious truth are only different designations of a single and identical truth, which is the manifestation of God in our consciousness, and this led to the recognition of Jesus as the precise personification of our most intimate and elevated relations with God. Since the author regards the conclusions at which he arrives as purely relative to his own consciousness and disclaims any intention to impose them on others, we may refrain from enlarging on the weakness of the intuitionist position, and let the matter pass as a statement of one of the varieties of religious experience.

D. M.

Die Philosophie des Krieges. Von Dr. S. Rudolph Steinmetz, im Haag. Leipzig : J. A. Barth, 1907. Pp. xvi, 352. Price M.7.

This mass of reflections, too unsystematic ever to have deserved the name of a philosophy of the subject, and itself the outcome of a philosophy with little to recommend it, nevertheless deserves to be read. If this were a political paper, I should have a good deal to say on the text offered by this book, but, fortunately, my present task is different. Dr. Steinmetz holds a brief for War. He is of opinion that its essential and eternally valid functions are : to preserve the division of mankind into states—the highest form of organisation of which it is capable ; to furnish each of these states with the best and only form for the application of its energy as a whole to some one end ; to be the occasion that calls forth the most extreme and the highest form of human exertion ; and, finally, to furnish a *Weltgericht* the judgments of which are beyond cavil or dispute. I confess to rather enjoying the criticism of Mr. Carnegie's plans and aspirations ; but, while as much convinced as Dr. Steinmetz of their immediate futility and possible mischievousness, that does not preclude a faith in the constant widening of the sphere of Law and consequent restriction of that of War. That the consequences will be wholly good is not, indeed, self-evident. It is well that some one should say boldly what there is to say in favour of War, as Dr. Steinmetz does, at a time when its claims are obscured by clouds of superficial sentimentality, or lost to view through failure of historical vision or lack of philosophical insight, and when its demands are shirked through ignoble ideals or sheer lack of manliness. War has played a great and not wholly evil part in shaping the destinies of mankind, and will continue to do so until a really efficient substitute for it, at present difficult to imagine, has been found ; but it is not quite rational enough to have the eternal reality our author ascribes to it. He has

much to say that is true enough, but good troops may enlist for a bad cause, and, being badly drawn up or led too far from their base, suffer defeat: and I think our author's arguments are in their case. He promised a dispassionate investigation of War; but you soon feel he has come not to bury Cæsar but to praise him. He is, in short, too one-sided. When he is investigating the disadvantages of War, he is really busy proving that they are no worse than those of peace. What is not clear is that we need have both—or either. He certainly hits the right nail on the head in insisting that, so long as the present division of mankind into states continues, there must be War. It is more difficult to follow him when he converts the argument simply and insists that there must continue to be War to ensure the division of mankind into states. Mankind, he insists, cannot be a state, therefore cosmopolitanism is all wrong and universal peace a silly dream, the realisation of which would be quite undesirable. Well, that is a big question. If a separate national existence is such a good thing, why should it ever prove a weakness, and why do we not see that we get more of it? Why do we submit to such clumsy aggregations as the modern state? Why are Bavarians and Prussians not leading a higher and a better life by cutting one another's throats at irregular intervals? Why does Scotland not again become a separate state at the cost of war with England? Why, for the matter of that, does the empire of Notting Hill not become an accomplished fact? And why, on the other hand, does the frenzied political life of Ireland just spring from its foolish fancy to be a separate state in impossible disregard of circumstances? It is quite plain that such an argument as Dr. Steinmetz's would carry one a great deal too far out of any foundation in reason or actuality. The peace accomplished within the bounds of the German and British empires shows that nations are capable of drawing together into vast communities the peace of which they feel it impious to disturb, and of drawing together into ever-increasing organic unity. Who shall put an end to such a process or mark its extreme limits? Just one remark in conclusion. As we have the author's word for it that he is incapable of mere national prejudice—a thing which leads to so much meanness, pettiness and spitefulness—we must ascribe his systematically disparaging and frequently offensive references to this country—and to this country alone—to his defects as an individual.

David Morrison.

Bericht über den II. Kongress für Experimentelle Psychologie in Würzburg, April, 1906. Edited by Prof. F. Schumann. Leipzig: Barth, 1907. Pp. xviii, 266. Price M.9.

An interesting and valuable feature of this report is the series of reviews by most competent persons of the work done up to date in several departments of psychology. Külpe leads the way with an excellent critical account in 56 pages of the present position of experimental æsthetics. His paper falls into two parts, of which the first treats of the methods, and the second of the chief results of the experimental investigation of æsthetics. Krueger follows with a close and detailed discussion of psychological problems related to experimental phonetics in as many pages. The subject and its literature are treated exhaustively. Weygandt then surveys work on the psychological examination of feeble-minded children (12 pp.). Sommer discusses the relation between individual psychology and psychiatry in a very interesting manner (14 pp.). There are three problems which bring the alienist into touch with

psychology, namely, the need of a psychological account of pathological cases, the discovery of on-coming mental disease in the still normal state, and the question whether pronounced individual traits have in general any relation to the abnormal. These last two problems are set in relation to our present knowledge of mental disease. Last of all, Schumann discusses on broad lines the work and problems of the psychology of reading (30 pp.). The papers of Külpe, Krueger and Schumann must be warmly recommended to all interested in the progress of the subjects treated. They will be found very useful, the problems and the literature being most thoroughly handled.

Of the papers read at the Congress many have appeared or will appear in extended form in journals, but attention may be drawn to a few of the more important. Pfeiffer has developed a method for determining qualitative types of mind in schoolwork. It follows the line which Binet took in dividing writers into descriptive, explanatory, erudite and emotional types on the basis of written descriptions of given objects, but Pfeiffer's method is finer and more detailed. His results bid fair to be a most interesting contribution to experimental pedagogy, and to throw light on the development of the intellect and feeling in school children during successive years. Stumpf's paper on "Gefühlsempfindungen," which has appeared in the *Zeitschrift für Psychologie*, vol. xliv., marks an important stage in the history of the psychology of the feelings. A good case is made out for the classification of all feelings which are roused by peripheral stimulation and bear a reference to perceptual objects, as sensations. Four papers discuss experiments carried out at Würzburg in Külpe's psychological laboratory, and all four treat of problems connected with complex mental processes. Dürr has investigated the relation between voluntary action and association, while Messer has examined the functional and qualitative characteristics of the judgment process. Bühler, in referring to his work on complex thought-processes, justifies the distinction of a class of unitary mental processes —"thoughts"—not to be confounded with representations or unconscious excitations of such in any form. These thoughts are remembered, connected with one another, and reproduced in a way which precludes their reduction to sensation or feeling, or to these as qualified by certain functions. It is the "thought," or, as it has been called, the conceptual element in perception, etc., which gives sensational and representational elements any objective reference at all, and provides a basis for knowledge as a psychological state. Lastly, Schultze has investigated what may be called the effect-accent, that peculiar appearance which a line seems to have when it forms the basis of an expression in the drawing of a face, for example, and which it does not have when isolated. In close connexion with these four papers stands the work of Ach on the quantitative determination of the determinative strength of the instruction on the reaction experiment, or, in general, of the voluntary determination in relation to the associative basis brought into play by the situation to be met by an act of will, *i.e.*, by the stimulus. The determining power of the will is found to be enormously greater than that of the ideo-motor compulsion. This piece of work is likely to lead to interesting developments. These last five papers are significant of an important movement towards successful investigation of thinking which ought not to be overlooked.

Most of the other papers carry on familiar problems.

H. J. W.

Lehrbuch der Geschichte der neueren Philosophie. Von Dr. Harald Höffding, Professor der Philosophie an der Universität in Kopenhagen. Leipzig: O. R. Reisland, 1907. Pp. x, 286.

Prof. Höffding takes advantage of the opportunity furnished by its translation into German to amplify, and in some respects to alter, the sketch of the history of modern Philosophy employed by him in teaching. In his modest Preface he expresses a sense of inevitable short-comings, but in spite of these his little book is quite successful in giving a valuable and graphic account of the development of European reflection from the Renaissance to the present moment. It is really astonishing how few links he has dropped, and how interesting and pregnant he manages to make even the briefest of his notices of individual writers. Notwithstanding his limited canvas he succeeds in presenting the great systems usually selected for detailed exposition in that historical setting in which alone they are really intelligible, and which is the best corrective of any tendency to a narrow devotion. When a full account is taken of an author's historical position he can never be made to descend upon our studies like the *Deus ex machina*. Prof. Höffding's synoptic vision begins to fail him with the close of the Romantic speculations, and he thereafter furnishes us with a rather slender clue to a labyrinth, but even to do so has entailed a mass of reading that is impressive and an amount of reflection that is possible to very few. He at least surveys the ground and guides to those writers from whom we may wish to learn. Prof. Höffding is, as always, almost more than just to English philosophy. His interest and appreciation is a standing reproach to any who may still tend to regard it as an evil tradition with which we must part. His book is furnished with a chronological list of the most important philosophical works.

D. M.

Der Intellectualismus in der Griechischen Ethik. Von Max Wundt. Leipzig: Wilhelm Engelmann, 1907. Pp. 103. Price M.2.80.

Students of Greek Ethics will find this a useful and interesting little work. The author traces the Intellectualism of Greek Ethics to three distinct sources which finally mingle in the mature ethical speculation of Plato. These sources are (1) what the author calls 'Homeric Intellectualism,' defined mainly by the antithesis between blind, impulsive passion and calm, deliberating, self-controlled reason; (2) 'Mystic Intellectualism,' which term covers everything from the occult teaching of the mysteries to philosophical speculation about the supernatural and divine; (3) 'Practical Intellectualism,' *viz.*, the value put upon skill, fitness for work, understanding one's business. Within each of these tendencies there is a certain development. Thus the author shows in a most interesting way how the originally psychological opposition between passionate impulse and calm reason becomes naturally an ethical opposition between wrong and right action; how the mystic intellectualist develops into Plato's dialectician and Aristotle's 'theoretical' man; and how finally the fitness for a craft becomes the 'virtue' of the citizen. The author then proceeds to trace very briefly how these three ideals of the calm and self-controlled man, the mystic sage and the skilled craftsman fuse into one comprehensive ethical ideal in the thought of Socrates, Plato and Aristotle—each laying different emphasis on different sides of the ideal. Finally, the history of this ideal in later speculation down to Neoplatonism is shortly outlined. The book may be recommended.

R. F. A. H.

Die Functionen des Zentralen Nervensystems: Ein Lehrbuch. Von Dr. M. Lewandowsky. Jena, 1907.

Dr. Lewandowsky is a specialist for diseases of the nervous system and a physiologist who has had much experience of experimental interference with the central nervous system in the higher animals. Approaching his subject from these two points of view, he has written a clear and well-arranged account of the most important modern work done upon these two lines. The rapid progress of our knowledge of the central nervous system has been attended at every step by vigorous controversy and great differences of opinion on many fundamental points still obtain among the leading workers, while new problems keep coming into view far more rapidly than generally acceptable solutions of the old ones can be found. Unlike some of his active fellow-workers Dr. Lewandowsky discusses many of these problems with sound judgment, marshalling the evidence and holding the balance between the contending parties with a sure and impartial hand. The chapters on Aphasia and allied conditions are especially well done. The book may be strongly recommended to all psychologists, as being just the kind of physiological treatise they should read every few years.

W. M'D.

Het tegenwoordig Standpunt en de Beteekenis der Molekulairtheorie. By J. P. Kuenen, Rede bij de Aanvaarding van het hoogleeraarsambt aan de Rijks—Universiteit te Leiden, den 25sten Februari 1907, uitgesproken. Leiden.

On the occasion of his recent installation to a Chair of Physical Science at the University of Leiden, Prof. J. P. Kuenen gave an inaugural lecture on the modern development and position of the molecular theory. He began by stating the case of the molecular theory as it stood some time ago, before the great discoveries of the last few years, and brought forward in its support the easy explanation of so many qualities of bodies in a fluid or gaseous state, and also, among other things, the recent advances of ultramicroscopic research. He then gave a short exposition of the main facts about radio-activity and its connected phenomena up to now discovered, which all served to bring the molecular theory into prominence again, after the reaction which some ten years ago had been in full force against it. The new facts not only supported the molecular theory but also extended it to the point of making room for different hypotheses in describing the building up of molecules and atoms out of still smaller particles, while at the same time they brought it into close connexion with the electro-magnetic theories of light and other phenomena.

The enormous advance which, in this way, has been made of late, ought not to make us forget that even by this advance the total number of unsolved problems has only been multiplied. It may be attractive to the human mind, it may even be the basis of all scientific research to try to bring all phenomena back to one common basis, and establish a theory which could explain them all, but for the present, Prof. Kuenen maintains, it would be unscientific to do so. Each class of phenomena still has its own theory, its own shortest and simplest way of describing them; and if we are to look for some sort of unity in nature, some sort of monism, let us do it by looking into ourselves and not around and outside ourselves. Only in that way can we keep room in our final theories for those higher phenomena of mind which cannot be interpreted as part of an objective world.

Il Suicidio nel diritto e nella vita sociale. Dott. Antonino Marchese de Luna. Ermanno Loescher & Co., Roma, 1907. Pp. 166.

This is not so much a scientific as a practical essay, an ethical tract on the serious increase in suicide, and on methods, repressive and preventive, for checking it. Some half a dozen works, or chapters in works, dealing with the same subject by his fellow-countrymen are discussed, but the author does not extend his inquiries or criticisms to transalpine or transmarine opinion. The sanctions appealed to are ethical and secular, exclusively. The human unit is represented, no doubt justly, as not belonging to himself nor 'living unto' himself, but as born into his society laden with debt and duty. The final appeal is to educators of all kinds for a more adequate 'education of the soul,' the radical cause of suicides being identified as 'ineducazione psichica'. But as to the analysis and synthesis of the psychology of suicide the frank confession is made, '*non mi interessa approfondirla*'. The statistics of suicides are represented by one table of Italian cases during the last quarter of a century, with no corresponding figures of the changes in population by which the increase in those cases might be justly estimated. And the history of suicide is dismissed in the one brief generalisation,—a very rash though, of course, not an original assumption—as to the paucity of suicides in the infancy of the 'storia d'umanità'. There is the further comment on the total absence of suicides under the matriarchate, but this judgment, though incidentally of high interest, belongs rather to 'prehistoric peeps' than to historical evidence. It is nevertheless conceivable that ethical opinion on this social phenomenon, the grave import of which no one will question, might receive guidance of some value from a more thorough historico-sociological investigation. Primitive societies frequently perform large functions of partial self-suicide, where they judge that, from various reasons, there is unfitness to let live. Older societies are reducing these functions to a minimum. Pending the transition, from those severer anthill-like corporate conditions, to a social organisation adequate for a more highly evolved state, a certain anarchic individualism is dominant, individuals disposing of their lives, much as the tribe used to do for them. Is the individual, during this transitional age, conceivably as good a judge of his unfitness to live as the society in which he lives?

C. A. F. Rhys Davids.

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Giovanni Gentile, *Giordano Bruno nella Storia della Cultura*, Milano, Sandron, 1907, pp. 146.

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VIII.—PHILOSOPHICAL PERIODICALS.

Philosophical Review. Vol. xvi., No. 2. **F. Thilly.** 'Causality.' [(1) The idea of cause is a general formula, meaning that one phenomenon is somehow dependent on another; its essential element is the idea of ground. Every science gives the idea a particular form suited to itself; so that the nature of the particular causes to be employed is not deducible from the idea of causality as such. (2) The causal function cannot be sensationalistically explained; we must connect our sensations. It belongs to the furniture of the mind, and in this sense may be called *a priori*. (3) The validity of the causal principle lies in the fact that it is a postulate of human thinking, and that there can be no knowledge without it.] **C. M. Bakewell.** 'The Ugly Infinite and the Good-for-nothing Absolute.' [Philosophy has always been haunted by the antinomy of the infinite, the endless regress implied in empiricism, and the absolute, the fixed and final standard of idealism. The Greek absolutists dubbed the infinite ugly; modern evolutionary empiricists dub the absolute useless. Now even the static absolute has contributed to clearness of logical thought, besides giving us some of our best devotional literature. But modern idealism is dynamic; and the dynamic absolutist finds the value of the conception of the fixed in making intelligible the possibility of working away from his empirical starting-point by definite and sure steps into a world of meaning where nothing is ever lost.] **R. B. Perry.** 'The Conception of Moral Goodness.' [The interaction of interest and mechanical environment involves material values; the inherent structure of a simple interest, desiderative values; the differentiation of a simple interest, or the reciprocity of two or more simple interests, involves fundamental moral values; the reciprocity of moral interests, justice and free ideal values.] **G. H. Sabine.** 'The Concreteness of Thought.' [The attempt to define the concrete cannot stop short of an experience in which universality and individuality are at once completely satisfied. Only the Absolute, therefore, is fully concrete; actual experience appeals to us as concrete because it is always partially organised. Thought, then, being a function of concrete rationality by which experience is at once universalised and individualised, it follows that the notion of a pure experience must be given up; that there is no difference of principle between reflective and constitutive thought; and that reality can be conceived only as the ideally rational experience which is the goal of thought.] **B. A. G. Fuller.** 'The Theory of God in Book Λ of Aristotle's *Metaphysics*.' [The Aristotelian God is, no doubt, a pure ideal rising out of and reacting upon a world of finite beings, where alone (if at all) it can find concrete existence. Nevertheless, Aristotle gives a correct description of the structure and meaning of experience: for that is, in truth, a movement from possible to actual, from unrealised to realised capacities, not inaptly characterised as a striving of consciousness to think itself in rational form.] Reviews of Books. Notices of New Books. Summaries of Articles. Notes.

Psychological Review. Vol. xiv., No. 2. **J. R. Angell.** 'The Province of Functional Psychology.' [We may distinguish three types of functional psychology. It is (1) the psychology of mental operations, as distinct from the analytic study which deals with the 'what' of consciousness. It deals (2) with mind conceived as primarily engaged in mediating between the environment and the needs of the organism. This is the psychology of the fundamental utilities of consciousness, all possibly reducible to selective accommodation. And it is (3) a psychophysical psychology, which constantly insists on the essential significance of the mind-body relationship for an adequate comprehension of mental life. Logically, the first form is propædeutic to the other two; practically, all three are integral parts of a common programme. The advantages of functional psychology are its readiness of application, its suggestiveness for animal psychology and mental pathology, its close affiliation to philosophy, and in general the organic flexibility of its attitude.] **W. M. Urban.** 'Definition and Analysis of the Consciousness of Value, II.' [(1) The problem now is the further development of the appreciative distinctions in primary worth feeling—those descriptions of his feelings which the subject seeks as equivalents for his worth predicates applied to objects. (2) The views that feeling has innumerable modifications, and that it is merely intensity of pleasantness and unpleasantness, are unworkable. Mediating between the two, we find (3) that every concrete feeling attitude has two primary meanings, its directions and its references. The former are positive and negative, pleasant and unpleasant. The latter are either transgredient and dynamic (tension, restlessness, contraction) or immanental (repose, relaxation, expansion). Thus the tridimensional theory is a true description of feeling-attitudes, or feeling as related to conation. (4) It follows that the criterion of a feeling attitude is the presence of a cognitive act (presumption, judgment, assumption) as presupposition of the feeling. The transgredient reference appears in emotive attitudes where an habitual presupposition of reality meets with opposition or arrest; the immanental, where an accommodation is realised. (5) Acquired feeling attitudes arise by way of a progression in meaning or a value movement. They are (*a*) the acquired meanings of simple appreciation, the mode of obligation (transgredient) and the æsthetic mode (immanental), and (*b*) those of characterisation and participation: personal worths, values of utilisation, common meanings of participation value. (6) To account for the quantitative aspect of worth predicates, we must distinguish depth or degree of feeling of value from intensity of feeling tone. The distinction does not lead to a dualism, but is a natural outcome of the reference of feeling to conative dispositions. (7) The differentiation and fixation of objects and predicates of valuation must be traced to fundamental laws of psychical process. Such laws are capable of quantitative determination, and may be described as the Laws of Valuation.] **H. B. Thompson** and **K. Gordon.** 'A Study of After-Images on the Peripheral Retina.' [Detailed report of peripheral after-image phenomena observed on backgrounds of various brightnesses with the light-adapted eye in diffuse daylight. In a coloured after-image, that colour element is emphasised which in brightness approaches the brightness of the background.]

American Journal of Psychology. Vol. xviii., No. 2. **C. Spearman.** 'Demonstration of Formulæ for True Measurement of Correlation.' [Gives mathematical proofs of the author's formulæ for eliminating the effects of irrelevant factors and of inaccurate observation.] **M. Meyer.** 'The Significance of Wave-form for our Compre-

hension of Audition.' [We have to find a way of looking at curves which leads to a considerable resemblance between what we see and what we hear, and then to ask whether the ear can function mechanically in the manner suggested by this way of looking at the curves. Applying this criterion, the writer discards Stumpf's definition of an oscillation, and in his own finds support for his theory of audition.] **E. A. Alvord** and **H. E. Searle**. 'A Study of the Comparison of Time Intervals.' [There are great individual differences in the mode of reproduction of a standard interval: recourse is had to strain and relaxation, imagined movements, auditory rhythm, and auditory images of the limiting stimulus. With use of strain and relaxation, the longer intervals were shortened (fatigue?). With alternate long and short standards there was no effect of contrast, but rather a tendency to assimilation.] **E. Severance** and **M. F. Washburn**. 'The Loss of Associative Power in Words after Long Fixation.' [Under fixation, the meaning and the normal auditory-motor image disappear within the first few seconds, while the visual word remains familiar; then this too becomes a mere collection of letters, or even of strange marks. The meaning vanishes when the proper sound-image disappears under the law of shifting attention. The persistence of visual familiarity shows that associated ideas are not essential to recognition. The final stage of the process is a sort of auto-hypnosis.] **F. M. Urban**. 'On Systematic Errors in Time Estimation.' [In two sets of experiments, with long and short intervals, there appears a 'preference' for certain numerals. The high frequencies of these numerals in the latter case are due to known psychological conditions: overestimation of smaller and underestimation of larger times, reference to a visual mark. They are due, in the case of long intervals, partly to the choice of round numbers, partly to an unanalysed group of conditions. The low frequencies of adjoining numerals in both cases may, on the other hand, be brought under the general rule that the elements of a complex which are next to favoured elements with which they are not associated are at a disadvantage.] **L. P. Boggs**. 'Studies in Absolute Pitch.' [Reports tests (not very systematic) on various subjects. All had a musical inheritance, environment and training, but no special practice in memorisation. The ability to recognise the absolute pitch of tones seems to depend partly on discrimination of overtones, partly on the possession of a qualitative (absolute) tonal system.] **J. A. Bergström**. 'Effect of Changes in the Time Variables in Memorising, together with Some Discussion of the Technique of Memory Experimentation.' [The paper opens with a *résumé* of the methods of investigation of memory, and describes a universal memory-apparatus. Two sets of experiments are then reported: in the one, series of letters and associable words were read to the observers at varying intervals; in the other, nonsense syllables were visually exposed, with variation of exposure-time, of interval between exposures, and of pause between series and series. A review of the related literature leads to the distinction of four possible factors in the results: conditions aiding or obstructing the reception and association of the impression; changes and relative variations in retention; modifications in the recalling of impressions; and general conditions, such as fatigue or a general organising activity. Of these, the first appears to be predominantly important.] **F. Arnold**. 'The Initial Tendency in Ideal Revival.' [The initial tendency (and with it cases of apparently mediate association) can be explained if the present moment of consciousness is regarded, not as an isolated idea, but as an entire disposition which is excited by the cue, and which has in it a meaning and a tendency to explicate the series implicit in it.] **F. Angell**. 'On Judgments of "Like" in Discrimination Experiments.' [The number and correctness

of these judgments are determined by type; by the inductive effect of the course of experimentation; and by time-interval. They are rarely recognitive, but rather based on inference or on cognitive classification; if recognitive, they are apt to arise from accidental sensations or imagery.]
Psychological Literature.

JOURNAL OF PHILOSOPHY, PSYCHOLOGY AND SCIENTIFIC METHODS. iv., 6. **W. James.** 'Pragmatism's Conception of Truth.' [The sixth of a course of Lowell Lectures of which the first two have appeared in the *Popular Science Monthly*. Written with Prof. James's well-known brilliancy and charm, and full of memorable sayings. "The truth of a state of mind means this function of a leading that is worth while." "Our experience is all shot through with regularities." "Truth lives for the most part on a credit system." "Truth is made, just as health, wealth and strength are made, in the course of experience" "We have to live to-day by what truth we can get to-day, and be ready to-morrow to call it falsehood." The most striking thing about rationalistic definitions of truth is "their unutterable triviality". They have nothing to say as to "when a truth may go into cold storage in the encyclopædia and when it shall come out for battle". "Must I constantly be repeating the truth 'twice two are four' because of its eternal claim on recognition or is it sometimes irrelevant?" "A truth must always be preferred to a falsehood when both relate to the situation; but when neither does, truth is as little of a duty as falsehood. If you ask me what o'clock it is, and I tell you that I live at 95 Irving Street, my answer may indeed be true, but you don't see why it is my duty to give it. A false address would be as much to the purpose." Concludes that "it is the pragmatists and not the rationalists who are the more genuine defenders of the universe's rationality".] **H. W. Wright.** 'The Classification of the Virtues.' iv., 7. **R. S. Woodworth.** 'Non-Sensory Components of Sense-Perception.' [A continuation of his important criticism of the belief in imagery, which infers from the equivocal 'staircase' figure that 'the same sensations may give rise to diverse percepts,' and urges on psychological grounds that 'every percept has a felt quality of its own'. Such qualities are numerous and should be conceived as mental reactions. "A percept is not a synthesis of sensation and image; it is a reaction to the sensation." This, however, is not a mere 'universal form of thought,' but a biological conception.] **F. C. Doan.** 'Humanism and Absolute Subconsciousness.' [The Absolute is a subconscious background; not however richer than the humane self-consciousness but becoming divine in it.]

JOURNAL OF PHILOSOPHY, PSYCHOLOGY AND SCIENTIFIC METHODS. iv., 8. **J. Dewey.** 'The Control of Ideas by Facts.'—1. [Fruitful thinking which terminates in valid knowledge uses the distinction of facts and ideas and asserts an agreement or correspondence between them. The question is as to its nature. Dualistic epistemologies render it unanswerable: monistic ones, idealistic or realistic, leave it unsolved. Pragmatic or functional logic, therefore, does not invent the problem it tries to solve in a new way, by insisting that the distinction is relative to human purposes and interpreting 'agreement with fact' as meaning practical success.] **F. C. French.** 'A Factor in the Evolution of Morals.' [Taboo.] **C. H. Johnston.** 'Feeling Analysis and Experimentation.' [Points out that intent as well as content is revealed by introspection, and argues that "it seems most profitable to describe feelings in terms of bodily attitudes".] iv., 9. **E. B. McGilvary.** 'The Stream of Consciousness.' [Criticises James for his analysis of the Ego into a multitude of successive owners of the stream of consciousness each inheriting the content of its predecessor, but rather

ignores that this metaphorical mode of representation is only intended to illustrate the superfluity of a transcendent knower beneath or behind experience.] **F. C. S. Schiller.** 'The Pragmatic Cure of Doubt.' [J. E. Russell in iv., 3, ignores the pragmatic way of dealing with 'theoretic' doubt, and demands to be saved from doubt by no act of his own and *without* trying a cure which has to be tried to be found to be satisfactory. This perverse demand ultimately proceeds from a refusal to recognise the reality of choices.] **J. E. Russell.** 'A Reply to Dr. Schiller.' [*I.e.*, to the above and the paper in iv., 2. I. To make the being 'lost' of a person who does not know where he is depend on his purpose and his desire to be elsewhere, is consistent, but a *reductio ad absurdum* of pragmatism. A man is lost if he does not *know the way out*, and cannot be lost so long as he has a map. II. To find the pragmatic answer to scepticism satisfactory, one must already have adopted the pragmatic view of truth, but this remedy is worse than the disease, and so "I must elect to remain in doubt in preference to being saved at the expense of my logical understanding".]

International Journal of Ethics. Vol. xvii., No. 4, July, 1907. **O. A. Shrubsole.** 'The Relation of Theological Dogma to Religion.' [Religion preceded and will outlast dogma: dogma will go when its work is done.] **M. A. Shaw.** 'Some Facts of the Practical Life and Their Satisfaction.' [Identification of oneself with an ideal is an act of faith, making that ideal a present instead of a future reality. Righteousness by faith means that the ideal is not external but internal—the real or perfect self—and a present which is dynamic of the future.] **W. R. Sorley.** 'Ethical Aspects of Economics.—III.' [The worth or ethical value of economic goods can be estimated, inasmuch as the moral or spiritual life rests on the basis of material goods, or is dependent on material wants and satisfactions. Moreover, wealth is always the result of work, and work has a moral value.] **F. Carrel.** 'Has Sociology a Moral Basis?' [Sociology is a bipartite science, one part independent (statistical sociology) and the other a branch of morals (moral sociology).] **J. E. Boodin.** 'The Ought and Reality.' [A real process or evolution implies an absolute direction giving meaning and validity to ideals. Our ideals are structures striving to reflect this direction or *ought*, which determines their worth and survival.] **H. Johnson.** 'Some Essentials of Moral Education.' **H. L. Stewart.** 'Self-Realisation as the Moral End.' [Vindication of the principle against certain types of negative criticism.] **J. Morse.** 'The Psychology of Prejudice.' [Prejudice, *i.e.*, *undue* prepossession for or against anything, is related negatively or contrarily to apperception. It is an arrest of apperception, a refusal or inability to apperceive, disordered apperception.] Book Reviews.

Revue Néo-Scolastique. Mai, 1907. **J. Halleux.** 'Proofs of the Existence of God.' [A rehabilitation of what Kant calls the Cosmological Argument: the Prime Mover.] **F. van Cauwelaert.** 'Richard Avenarius.' **G. Legrand.** 'Ampère and Maine de Biran: Theory of Relations.' [To Ampère's argument that things in themselves exist because we know the relations between things in themselves, it is replied that such relations evince the being of things in themselves only in the ideal order.] **C. Sentroul.** 'The Preambles of the Kantian Question.' [The assumptions from which Kant started.] **L. Noël.** 'Pragmatism.' [History of.] **O. Sistini.** 'The Thomist Movement at Rome.' [St. Thomas and Suarez, Essence and Existence.]

Revue de Philosophie. 1er Juin, 1907. **E. Schiffmacher.** 'The Idea of God and the Idea of the Cosmos.' [Analogy of physical science and natural theology.] **A. de Gomer.** 'Free Will.' [Defence of, argues a difference between will and free will.] **C. Lucas de Pesloüan.** 'The Foundations of Arithmetic' (third article). **M. Thomas.** 'The Object of Metaphysics according to Kant and according to Aristotle.' [A review of M. Sentroul's book so entitled: raises the questions, What is a judgment? and, Whence comes the cognition of real existence? a valuable article.] There are instructive reviews of Dr. Schiller's *Studies in Humanism* and of A. Hamon's *Vie de la bienheureuse Marguerite-Marie*. 1er Juillet, 1907. **F. Mentré.** 'A Note on the Pragmatic Value of Pragmatism.' [Pragmatism suits the English character, suits the sceptic and even the mystic, but is the ruin of philosophy and of science, which progresses not without the disinterested study of truth for its own sake, 'useless studies,' as they are called, being indispensable to the 'useful'. This 'note' should be read by every pragmatist.] **Abbé Farges.** 'How Kant ought to be refuted.' [Quarrels with M. Sentroul for not insisting, with Aristotle and the schoolmen, that the mind through the senses has immediate intuition, not of sensations but of real objects. Kant is only refuted on this principle.] **E. Magnin.** 'An Observation.' [An extraordinary narrative of a cure of intestinal paralysis, tubercles and other complications by means of magnetism, aided by a secondary personality, who foretells accurately the stages of the cure and the date of its completion, 8th May, 1907. The narrator is the magnetiser himself.] **P. Fontana.** 'M. Durkheim's Course at the Sorbonne.' [An argument from totemism that religion has its roots neither in animism, nor in awe of nature powers, but in the sentiment of human society, as such.] 1er Août, 1907. **P. J. Cuche.** 'Study of Monism.' [A comprehensive sketch of Monist theories. The Law of Immanence, said to be the soul of Monism, is thus stated: "the one Substance is at once Force and Thought, and becomes by evolution all force and all thought".] **L. M. Billia.** 'Is not Idealism Christian?' [Idealism here is taken to mean Intellectualism as opposed to Pragmatism. The Good which the Pragmatist pursues must be a good in cognition.] **C. Lucas de Pesloüan.** 'The Foundations of Arithmetic.' [Final article.]

Zeitschrift für Philosophie und Philosophische Kritik. Bd. cxxx., Heft 1. **A. Meinong.** 'Über die Stellung der Gegenstandstheorie, etc.,' Dritter Artikel [Logic and epistemology differ as practice differs from theory. The one teaches us how to obtain accurate knowledge; the other shows what are the general conditions of all knowledge. But both assume a theory of objects, and their relation to it is much the same. The object of a concept is an incomplete representation. The object of a judgment is what Meinong calls an 'objective'. In conclusion, Meinong seems to rest the value of the new theory on its explanation of *a priori* certainty, and on its power to liberate us from what is called 'psychologism,' the painful and distorting method of reducing the processes of thought to specific mental experiences.] **Robert M. Wernaer.** 'Das ästhetische Symbol.' [Symbols are of two kinds as they are addressed to the understanding or to the emotions. The former are signs agreeing with the thing signified in one respect only, as when the Trinity is symbolised by an equilateral triangle. Allegories are essentially of this description. In emotional symbols on the other hand —and it is with these alone that æsthetics are properly concerned—the image and the emotion that it expresses are fused together into a single æsthetic whole.] **Karl Groos.** 'Beiträge zum Problem des "Gege-

benen".' [The data of consciousness, or what is 'given' to it, must also be 'taken' by it; that is to say no analysis can bring us to a residuum of sensation which is not to some extent elaborated by reason. This original datum is rightly described as an experience, although it admits of being ideally distinguished into an *a priori* and an *a posteriori* element. As regards the data or assumptions of special lines of thought they possess no common characteristic, being selected in reference to the interest on account of which each particular train of reasoning was started.] Rezensionen, etc.

KANT-STUDIEN. Vol. xii., No. 2, June, 1907. **Walter Zschocke.** 'Über Kant's Lehre vom Schematismus der reinen Vernunft.' [The author tries to show that the transcendental schema is superfluous in the *Kritik of Pure Reason* and ought to be cut out. He argues (1) that it fails to do the work for which it was invented, *viz.*, to bridge the gap between the pure forms of the intuition and the pure categories of the understanding. It is a mere name for the problem of reconciliation, not its solution. (2) That no reconciliation is necessary, for the synthesis of the given manifold in space and time already involves elements of understanding, and, on the other hand, each category contains, besides the intellectual element of necessity, a reference to synthesis in space and time. Intuition and understanding thus inherently imply and supplement each other. There is no need to reconcile them by an external *tertium quid*.] **Bruno Bauch.** 'Erfahrung und Geometrie in ihrem erkenntnistheoretischen Verhältnis.' [The author combats the contention of Poincaré (in *La Science et L'Hypothèse*) that the superiority of Euclid's system of geometry over others is merely a matter of 'convention' and 'practical convenience'. He admits that all systems of geometry are alike internally consistent and 'antinomically' consistent, *i.e.*, are legitimate alternatives for the conceptual analysis of space. He also admits that *no* system of geometry is logically derived from experience or can be verified by experience. But the superiority of Euclid's system is due to the fact, that it alone makes possible experience of a real world of external things. It is 'erfahrungstiftend'; it is 'Möglichkeitsgrundlage für Wirklichkeitserkenntnis'.] Reviews, Self-advertisements, Notes.

ZEITSCHRIFT FÜR PSYCHOLOGIE. Bd. xliii., Heft 4. **T. Ziehen.** Erkenntnistheoretische Auseinandersetzungen.—III. E. Mach.' [Mach is right in his insistence on the comparison of physical and psychical processes and uniformities. He has also, in the main, rightly apprehended the fundamental data of epistemology. He is, however, wrong in his account of the difference and the relation between physical and psychical. These are not identical, so that, *e.g.*, a given 'green' may be considered as dependent now on other stimuli, now on our optical organisation, and change from physical to psychical with the change of dependency: rather is the green-sensation (1) causally interconnected with other stimulus-sensations; (2) causally connected with brain-process, in the sense that this depends upon it; and (3) affected by brain-process, in the sense not of causality but of parallelism. From this point of view the writer discusses Mach's views of time, space and mass.] **H. Abels.** 'Ueber Nachempfindungen im Gebiete des kinesthetischen und statischen Sinnes: ein Beitrag zur Lehre vom Bewegungsschwindel (Drehschwindel). —I.' [Seasickness, which is a form of motor vertigo, is characterised by range of individual difference and by rapidity of habituation. These facts must be taken into account for a theory of rotatory vertigo. Neither Mach's nor Breuer's theory is adequate to them; the long duration of

the after-vertigo is inexplicable. If, now, we look at the effects produced upon the vestibular organ by the passage of a galvanic current, we find that the after-vertigo cannot be the result of the break-shock, but must depend upon a condition set up in the nervous apparatus by the nature and duration of the abnormal stimulation, and persisting for some time after its cessation. The same thing must then be true of rotatory vertigo.] Besprechung. [Cordsen on Lay's *Experimentelle Didaktik.*] Literaturbericht. Bd. xliii., Heft 5 u. 6. **G. Heymans** und **E. Wiersma**. 'Beiträge zur speziellen Psychologie auf Grund einer Massenuntersuchung, II.' [Subjects the questionary returns to mathematical treatment, with a view to ascertaining the degree in which character is determined on the one hand by sexual predisposition at large, and on the other by direct hereditary influences proceeding from the father and mother.] **H. Abels**. 'Über Nachempfindungen im Gebiete des kinästhetischen und statischen Sinnes: ein Beitrag zur Lehre vom Bewegungsschwindel (Drehschwindel).—II.' [The author finds his crucial test in Ewald's experiments on pigeons with the pneumatic hammer: as the reaction is brief, it follows that the sensation of rotation set up by a stimulus of short duration has no considerable persistence. He then proceeds, by way of the Mach and Purkinje kinæsthetic illusions, to progressive movements; here the salient fact is the difficulty of arousal of after-images of progressive accelerations. This explains our prompt perception of the direction, velocity and extent of progressive movements, and is itself explained by the character of the movements made in everyday life. Turning to the sensation of rotation, he distinguishes three separate moments: centrifugal force, which gives us the perception of velocity, of the position of the axis of rotation, and of the magnitude of the radius; angular acceleration, which indicates the direction of rotation, and the positive and negative changes of velocity during the total movement; and tangential progressive acceleration, which reinforces the moment of angular acceleration, and in certain experiments fuses with the moment of centrifugal force to produce an after-image. The interplay of these three factors is traced in detail through the phenomena of rotatory vertigo and its after-effects, with the result that there is a close analogy between these latter and the negative after-images of other sense-departments, although in all probability the two groups of phenomena take their origin at different levels of the neuro-sensory apparatus.] Kleine Mitteilung. **M. Urstein**. 'Ein Beitrag zur Psychologie der Aussage.' [Account of a flagrant case of mistaken identity of a prisoner.] **N. Ach**. 'Zweiter Kongress für experimentelle Psychologie.' Literaturbericht. Bd. xliv., Heft 1 u. 2. **C. Stumpf**. 'Über Gefühlsempfindungen.' [There are three possibilities as regards the sensory feelings; they are attributes of sensation, independent processes, or themselves sensations. Külpe has disproved the first; there is no valid evidence for the second; we are therefore forced to the third. Coming to details, we find first a special class of sensations of feeling in cutaneous and muscular pains, bodily discomfort, feelings of being unwell; and in lust, feelings of being well, bodily comfort, diffused physical contentment. These are indubitably of sensational character. They are, *e.g.*, reproducible; though the reproduction easily passes over into actual sensation. In treating of the affective tone of other sense-departments, we must distinguish between strong and moderate stimulation. The former brings in, besides the quality of special sense, a feeling sensation of the first sort. The affective tones of moderate stimulation are best regarded as concomitant sensations of central origin. Whether these concomitants can be separately ideated is a question; but if they cannot, they may still be separate sensational elements, and their inseparability in idea may be due to physiological conditions. The advantages of this view are that we are put on the track

of a causal, instead of a teleological, explanation of the facts; that we may attack feeling with all the weapons of sensational method: and that we mark off the problem of emotion from that of simple feeling.] **F. Krüger** und **C. Spearman**. 'Die Korrelation zwischen verschiedenen geistigen Leistungsfähigkeiten.' [A study, by biometrical methods, of the results obtained from the application of various mental tests to students of psychology. The authors find a high degree and constancy of correlation between very various capacities of the individual (discrimination of pitch, addition of numbers, filling-out of defective texts, rapidity of writing, reading and counting). These correlations seem to be the effects of a common central factor. Knowing the correlations of three capacities, we may calculate the correlation of any one of them with the central factor: this correlation, termed the central value or median of the capacity in question, appears to be a constant. The central factor is probably to be explained, in psychophysiological terms, as due to a plastic function of the nervous system, varying with the individual; but more work, psychological and biological, is needed on the point. On the score of method, it is necessary, in order to obtain unequivocal correlations and a coefficient of reliability of the method of test, to take at least two tests of each of the characters to be correlated.] Literaturbericht. Ankündigung. Berichtigung. Bd. xliv., Heft 3. **S. Witasek**. 'Über Lesen und Rezitieren in ihren Beziehungen zum Gedächtnis, I.' [First part of report of experiments with nonsense syllables, undertaken with a view to the comparison of the advantages for memory of repeated readings and of recitations without the visual cue.] **A. Mueller**. 'Die Referenzflächentheorie der Täuschung am Himmelsgewölbe und an den Gestirnen.' [The surfaces of reference proposed by von Sterneck are mathematical construction, not psychological fact. The explanation of the apparent magnification of the sun and of the apparent form of the twilight sky, as based upon a wrong estimate of horizontal distances due to intermediate objects is neither new nor true.] Literaturbericht. Bd. xliv., Heft 4. **A. Pick**. 'Zur Lehre vom Einfluss des Sprechens auf das Denken.' [In a previous paper, the author had shown that the spoken word may, by its perseverational tendency, influence thought; and had referred this influence to the subject's suggestibility. Accident has now brought him a case of traumatic hysteria combined with traumatic aphasia, the examination of which furnishes an experimentum crucis for the correctness of his view.] **S. Witasek**. 'Über Lesen und Rezitieren in ihren Beziehungen zum Gedächtnis.' [Apart from special results of a quantitative sort, the investigation shows that recitation is, in general, far superior to reading for purposes of retention. Economy of learning is attained by characteristic combinations of the two procedures, varying with the nature of the immediate task. It is probable that the difference between reading and recitation is not a simple difference of degree of attention, but that recitation implies another factor which we note in the experience of 'trying to think of' something. The nature of this factor requires special study.] Literaturbericht. Bd. xliv., Heft 5 u. 6. Literaturbericht. **K. L. Schaefer**, mit Unterstützung von **H. C. Warren**. 'Bibliographie der psycho-physiologischen Literatur des Jahres 1905.' [2,578 titles, as against 2,727 of the Psychological Index, and 2,463 of the same bibliography for 1904.] Bd. xlv., Heft 1 u. 2. **G. Heymans** und **E. Wiersma**. 'Beiträge zur speziellen Psychologie auf Grund einer Massenuntersuchung, III.' [1] On the general subject of heredity, the study has shown that the individual character is determined both by sex and by direct paternal and maternal inheritance; that the influence of sex is about three times as strong as that of paternal and maternal inheritance; that the influence of same-sexed direct inheritance is 30 to 40 per cent. stronger than that of cross-sexed; and

that the influence of maternal direct inheritance is 10 per cent. stronger than that of paternal. (2) The chief sex-difference brought out is that women are more active, more emotional, and less egotistic than men. (3) There are two main differences between the older and the younger generation. Both sexes show a tendency to lessened activity and moral retrogression. On the other hand, there is an upward movement, especially on the intellectual side, among the younger women. On the side of feeling and will, this is accompanied by intensification of all abstract or suprasocial tendencies, of self-feeling, of appreciation of the comic, and of irritability and self-dissatisfaction. No similar compensatory movement is found among the men. The authors recommend the prosecution of similar inquiries in other countries.]

Archiv für die Gesamte Psychologie. Bd. viii., Heft 1 und 2. **A. Messer.** 'Experimentell-psychologische Untersuchungen über das Denken.' [This paper of 224 pages gives the results of an investigation which at many points runs parallel to Watt's Experimentelle Beiträge zur Theorie des Denkens (*Archiv*, iv.). The method was essentially that of the verbal associative reaction, and for the most part Watt's apparatus was employed; the series began with the association of spoken to visual words, and gradually increased in complexity until, finally, sentences were displayed to the observer, which he was required to understand and to answer by way of agreement or dissent; a few experiments were also made with objects or pictures as stimuli in place of words. The writer goes into minute (and generally valuable) detail as regards the preparation, attitude and introspections of his observers. He finds the essential characteristic of the judging consciousness not in the formulation of the spoken sentence, nor yet in the occurrence of specific acts of affirmation or negation, but solely in the intention of the observer: "a certain relation between stimulus-idea and reaction-idea, to be described as the predicative or expressive relation, must be willed, intended, or at least recognised by the observer". Any reproduction of word by word thus becomes a judgment, provided that the observer had the intention of judgment; it is a question of the effectiveness of a task or problem. In everyday life, the problem is usually so familiar that it escapes our notice; only under experimental conditions do the *Urteilserlebnisse* become separately noticeable. Their exact analysis the writer leaves to further investigation, though he offers some introspective indications of their nature. He also gives a psychological classification of judgments. The paper concludes with chapters on psychical causality, the psychology of volition, dispositions of consciousness (*Bewusstseinseinlagen*), and individual psychology, in all of which interesting (and often very debateable) issues are raised.] **E. Duerr.** 'Bericht über den zweiten, vom 18. bis 21. April, 1906. in Würzburg abgehaltenen Kongress für experimentelle Psychologie.' Literaturbericht. **C. Spearman.** 'Fortschritte auf dem Gebiete der Psychophysik der räumlichen Vorstellungen: 1. Tastsinn.' **A. Kowalewski.** 'Zur Literatur des Problems: Leib und Seele.' **M. Kelchner.** 'Neue Literatur zur Bestimmung des Gefühlsbegriffs.' Einzelbesprechungen. Referate. Neue Zeitschriften.

IX.—NOTE.

ERRATUM. "MIND," New Series, No. 63, July, 1907.

The paragraph (p. 363) beginning "Sensational elements are mingled," and ending "in an act of reason," in Section 13 of Miss Bodkin's article on "The Subconscious Factors of Mental Process," should follow immediately upon the paragraph ending "cerebral activity" (p. 362).

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